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Bihar Electricity Regulatory Commission
Vidyut Bhawan-II, J.L. Nehru Marg, Patna 800 021

NOTIFICATION

The 17th November 2021

No. BERC-Case No.-SMP-07/2021-03---In exercise of powers conferred by sub section (1) of section 181 and clauses (zd), (ze) and (zf) of sub section (2) of section 181, read with sections 32, 61, 62, and 86, of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in that behalf, the Bihar Electricity Regulatory Commission hereby makes the following Regulations.

PART-I

PRELIMINARY

1. Short Title, Commencement and Extent.

- 1.1 These Regulations shall be called the **Bihar Electricity Regulatory Commission (Multi Year Transmission Tariff and SLDC Charges) Regulations, 2021.**
- 1.2 These Regulations shall come into force from the date of their notification in the Official Gazette.
- 1.3 These Regulations shall extend to the whole of the state of Bihar.

2. Scope and Extent of Application

These Regulations shall apply to all the Transmission Licensees and SLDC in the State of Bihar

- 2.1 These Regulations shall be applicable for determination of tariff in all cases covered under these Regulations from 1st April 2022 and onwards up to FY **2024-25** or till these Regulations are amended.
- 2.2 These Regulations shall be applicable where the cost based/ Aggregate Revenue Requirement (ARR) based tariff is determined by the Commission.
- 2.3 These Regulations shall not be applicable whose tariff has been discovered through tariff based competitive bidding in accordance with the guidelines issued by the Central Government and adopted by the Commission under Section 63 of the Act.

3. Definitions

3.1 In these regulations, unless the context otherwise requires;-

- 1) **"Act"** means the Electricity Act, 2003 (36 of 2003);
- 2) **"Accounting Statement"** means for each Year, the following statements, namely :—
 - (i) balance sheet, prepared in accordance with BERC (Power Regulatory Accounting) Regulations, 2018, with reference to each licensed or regulated business separately, duly certified by the statutory auditors;
 - (ii) profit and loss account, prepared in accordance with BERC (Power Regulatory Accounting) Regulations, 2018, with reference to each licensed or regulated business separately, duly certified by the statutory auditors;
 - (iii) cash flow statement, prepared in accordance with BERC (Power Regulatory Accounting) Regulations, 2018, with reference to each licensed or regulated business separately, duly certified by the statutory auditors;
 - (iv) balance sheet, prepared in accordance with the form contained in the Companies Act, 1956 or Companies Act, 2013, as applicable;
 - (v) profit and loss account, complying with the requirements contained in the Companies Act, 1956 or Companies Act, 2013, as applicable;
 - (vi) cash flow statement, prepared in accordance with the applicable Accounting Standards of the Institute of Chartered Accountants of India;
 - (vii) report of the statutory auditors ;
 - (viii) reconciliation statement, duly certified by the statutory auditors, showing the reconciliation between the total expenses, revenue, assets and liabilities, of the entity as a Company and the expenses, revenue, assets and liabilities, separately for each business regulated by the Commission and unregulated business operations;
 - (ix) cost records prescribed by the Central Government under the Companies Act, 1956 or Companies Act, 2013, as applicable; together with notes thereto, and such other supporting statements and information as the Commission may direct :
 Provided that separate Accounting Statements shall be prepared and submitted to the Commission for each licensed Business

in accordance with the Licence conditions, and for each regulated Business :

Provided further that, in case separate Accounting Statements are not submitted for each licensed Business in accordance with the Licence conditions and for each regulated Business for the Financial Year (FY) 2022-23 onwards, the Petitions filed by the Transmission Licensee or SLDC, as the case may be, may be rejected by the Commission after giving the Petitioner a reasonable opportunity of being heard:

Provided, in Case of SLDC, if separate Accounting Statement is not available, an allocation statement duly certified by the Statutory Auditor is to be submitted

Provided also that the Transmission Licensee or SLDC, as the case may be, shall submit the Statutory Auditor's comments, observations and notes to Accounts, alongwith the Accounting Statements, and a summary of the key issues highlighted by the Statutory Auditor and the steps taken to address them:

Provided also that, in respect of a Local Authority engaged in the business of distribution of electricity, the Accounting Statement shall mean the items mentioned above as prepared and maintained in accordance with the relevant statutes applicable to such Local Authority:

Provided also that till the SLDC remains a part of Bihar State Power Transmission Company Limited (BSPTCL), separate books of accounts for SLDC shall be maintained by the Bihar State Power Transmission Company Limited and shall be audited and certified by the statutory auditor

- 3) "Audited accounts or Audited Accounting Statements" for the purpose of licensed or regulated business shall mean (Audited) Regulatory Accounts prepared in accordance with BERC (Power Regulatory Accounting) Regulations, 2018.
- 4) **"Additional Capitalisation"** means the capital expenditure actually incurred after the date of commercial operation of the transmission system and admitted by the Commission after prudent check subject to Regulation 19 provided herein after.
- 5) **"Aggregate Revenue Requirement" or "ARR"** means the costs pertaining to the licensed business which are permitted, in accordance with these Regulations, to be recovered from the tariffs and charges determined by the Commission;
- 6) **"Allocation Statement"** means, for each Year, a statement in respect of each of the Other Businesses of the Transmission Licensee undertaken for optimum utilisation of its assets, showing the amounts of any revenue, cost, asset, liability, reserve or provision, etc., which has been charged from or to each such Other Business together with a description of the basis of that charge ; or determined by apportionment or allocation between different

Businesses of the Transmission Licensee, together with a description of the basis of the apportionment or allocation :

- 7) **"Allotted Transmission Capacity"** means the power transfer in MW between the specified point(s) of injection and point(s) of drawal allowed to a long-term customer or a medium-term customer on the intra-State transmission system under the normal circumstances and the expression "allotment of transmission capacity" shall be construed accordingly:
 Provided that the Allotted Transmission Capacity to a long-term transmission customer or a medium-term transmission customer shall be sum of the generating capacities allocated to the long-term transmission customer or the medium-term transmission customer from the generating stations and the contracted power, if any;
- 8) **"Auditor"** means an auditor appointed transmission licensee or SLDC as the case may be, in accordance with the provisions of sections 224, 233B and 619 of the Companies Act, 1956 (1 of 1956), as amended from time to time or Chapter X of the Companies Act, 2013 (18 of 2013) or any other law for the time being in force;
- 9) **"Authority"** means Central Electricity Authority constituted under section 70 of the Electricity Act, 2003.
- 10) **"Availability"** in relation to a transmission system for a given period means the time in hours during which period the transmission system is capable to transmit electricity at its rated voltage expressed in percentage of total hours in the given period and shall be calculated as provided in Appendix-II to these Regulations.
- 11) **"Base Year"** means the financial year immediately preceding first year of the control period and used for the purpose of these Regulations;
- 12) **"Balancing and Settlement Code"** means such Code as may be stipulated by the Commission, or by the SLDC with the approval of the Commission, for the balancing of energy accounts and settlement of differences among the users of the grid in the State of Bihar
- 13) **"Beneficiary(ies)"**
 - (a) in relation to a Transmission Licensee, the Transmission System Users.
 - (b) in relation to the SLDC, the Generators including RE Generators with Long term Access, the Distribution Licensees and Open Access consumers who utilise the *Intra-State* Transmission system for transmission of electricity and / or utilise the distribution system of a Licensee in the State for wheeling of electricity and/or avail the services of the SLDC relating to scheduling and real-time grid operations, State energy accounting, operation of pool account, etc.
- 14) **"Books of Accounts"** for the purpose of licensed or regulated business shall mean Regulatory Books of Accounts drawn up in

accordance with BERC (Power Regulatory Accounting) Regulations, 2018

- 15) **"Bulk Power Transmission Agreement"** means an executed Agreement that contains the terms and conditions under which a Transmission System User is entitled to access to an *intra-State* transmission system of a Transmission Licensee
- 16) **"Change in Law"** means occurrence of any of the following events:
 - (a) enactment, bringing into effect or promulgation of any new Indian law; or
 - (b) adoption, amendment, modification, repeal or re-enactment of any existing Indian law; or
 - (c) change in interpretation or application of any Indian law by a competent court, Tribunal or Indian Governmental Instrumentality which is the final authority under law for such interpretation or application; or
 - (d) change by any competent statutory authority in any condition or covenant of any consent or clearances or approval or licence available or obtained for the project; or
 - (e) coming into force or change in any bilateral or multilateral agreement/treaty between the Government of India and any other Sovereign Government having implication for the generating station or the transmission system regulated under these Regulations.
 - (f) any change in taxes or duties, or introduction of any taxes or duties levied by the Central or any State Government
- 17) **"Charges"** means payments to be collected by the Transmission Licensee or SLDC for the services rendered by it.
- 18) **"Commission"** means the Bihar Electricity Regulatory Commission;
- 19) **"Conduct of Business Regulations"** means the Bihar Electricity Regulatory Commission (Conduct of Business) Regulations, 2005, and its amendments from time to time.
- 20) **"Contracted Capacity"** means the capacity in MW contracted by a long-term Transmission System User as part of its long-term power procurement plan through a power purchase agreement or arrangement, and shall be equivalent to the deemed Transmission Capacity Right of a Transmission System User as specified under the Regulations of the Commission governing Transmission Open Access.
- 21) **"Control Period"** means a multi year period normally comprising of five financial years or as may be determined by the Commission, for submission of forecast in accordance with these Regulations;
- 22) **"Cut off date"** means 31st March of the year closing after two years of the year of commercial operation of the project, and in case the project is declared under commercial operation in the last quarter of a year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation:

Provided that the cut-off date may be extended by the Commission if it is proved on the basis of documentary evidence that the capitalisation

could not be made within the cut-off date for reasons beyond the control of the project developer;

- 23) **"Date of Commercial operation" or "COD"** in case of a transmission system shall mean the date declared by the Transmission Licensee from 00:00 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end. Date of commercial operation in relation to a communication system or element thereof shall mean the date declared by the transmission licensee from 00:00 hour of which a communication system or element is put into service after completion of site acceptance test including transfer of voice and data to respective control centre as certified by the respective State Load Dispatch Centre.

Provided that where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the Generating Company and Transmission Licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement:

Provided further that in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the Transmission Licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the Transmission Licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof.

- 24) **"De-capitalisation"** means the reduction in Gross Fixed Assets corresponding to the removal of assets as approved by the Commission.
- 25) **"Existing Project"** means transmission project declared under commercial operation from a date prior to notified date of these tariff regulations by the Commission as per Regulation 1.2.
- 26) **"Expenditure"** means reasonable and prudently required expenditure incurred on the following:
- a) salaries and wages of staff, welfare expenses excluding management remuneration covered below;
 - b) Directors remuneration, fees, expenses including facilities;
 - c) salaries and wages of corporate office / registered office;
 - d) financing cost excluding penal interest / charges;
 - e) interest charges on loan(s) borrowed for capitalized assets;
 - f) interest on temporary accommodation to the extent of approved unrealized arrears from the consumers
 - g) interest on working capital

- h) Return on equity;
 - i) financing charges applicable to operational account;
 - j) interest on security deposits (except the security deposits held in the form of Bank Guarantee) from transmission System Users;
 - k) Impact of variation in foreign exchange rate in case of foreign currency loan taken with due approval and is not capitalised;
 - l) Depreciation
 - m) Rents, rates and taxes, other than all taxes relating to income / profits;
 - n) Legal charges;
 - o) Auditor's expenses, Auditor's fees; auditor's expenses; Payment to Auditors in any other capacity or for any work which is necessary to be got done from them in connection with audit;
 - p) Consultancy charges for work which cannot be done in house or is uneconomical in doing in-house or is essential to be done from outside sources;
 - q) Bad debts actually written off subject to Commission's clearance;
 - r) Other expenses necessary which are ancillary or incidental to the business of electricity except penalty etc levied under the Act or any other law in force;
- 27) **"Extended Life"** means the life of a transmission system or element thereof beyond the period of useful life, as may be determined by the Commission on case to case basis;
- 28) **"Financial Year"** means a period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year;
- 29) **"Force Majeure Event"** for the purpose of these regulations means the event or circumstance or combination of events or circumstances including those stated below which partly or fully prevents the transmission licensee to complete the project within the time specified in the Capital Investment Approval, and only if such events or circumstances are not within the control of the transmission licensee and could not have been avoided, had the transmission licensee taken reasonable care or complied with prudent utility practices:
- (a) Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the period for which data is available; or
 - (b) Any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
 - (c) Industry wide strikes and labour disturbances having a nationwide impact in India *and/or state wide impact in Bihar* ;

- 30) **“High Tension”** (or **“HT”**) means all voltages defined as “high” or “extra high” voltage under the applicable Rules and Regulations as specified by the Central Electricity Authority
- 31) **“Income”** shall include all income from any sources but shall not be limited to the following:
- a) Gross receipts from transmission of energy or SLDC fees & charges, as the case may be, excluding late payment surcharge, if any, based on the orders of the Commission;
 - b) Rental of meters, plant, equipment and other apparatus hired to the consumers;
 - c) Income from services to consumers by way of repair or any sale or other service other than capital receipts;
 - d) Interest on investments, bank balances including fixed and call deposits and any other income in the form of interest;
 - e) Profit on sale of assets;
 - f) Wheeling of energy;
 - g) Non tariff income;
 - h) Income from other business;
 - i) Any receipt or refund from other sources against any expense or likely expense which has been earlier allowed as expense in the tariff;
 - j) All other general receipts arising from and ancillary or incidental to the business of electricity supply;
 - k) Other general receipts in terms of Act / Regulations including use of assets for other business whether actually recovered or not;
- 32) **“Indian Governmental Instrumentality”** means the Government of India, State Government and any Ministry or Department or Board or Agency or regulatory or quasi-judicial authority controlled by Government of India or the Government of the State where the Project is located
- 33) **“Intra-State Transmission System”** (or **“InSTS”**) means any system for conveyance of electricity by transmission lines within the area of the State of Bihar, and includes all transmission lines, sub-stations and associated equipment of Transmission Licensees in the State :

Provided that the definition of point of separation between a transmission system and distribution system and between a Generating Station and transmission system shall be guided by the Regulations notified by the Central Electricity Authority under clause (b) of Section 73 of the Act

- 34) **“Implementation Agreement”** means the agreement, contract or memorandum of understanding, or any such covenant, entered into (i) between transmission licensee and generating station or (ii) between transmission licensee and developer of the associated transmission system for the execution of project in coordinated manner;
- 35) **“License”** means a License granted by the Commission under Section 14 of the Act;

- 36) **"Licensed Business"** means the functions and activities, which the Licensee is required to undertake in terms of the License granted by the Commission or as a deemed Licensee under the Act;
- 37) **"Market operation function"** means the functions of scheduling, despatch, data acquisition, energy accounting and deviation settlement, transmission loss calculation and apportionment, operation of pool account and congestion charge account, administering ancillary services, information dissemination and any other functions assigned to the SLDC by the Act or Regulations or Orders.
- 38) **"Non-Tariff Income"** means the income relating to the regulated Business other than from Tariff, excluding any income from Other Business.
- 39) **"Operation and Maintenance expenses" or "O&M expenses"** means the expenditure incurred on operation and maintenance of the transmission system including part thereof, and includes the expenditure on man-power, repairs, maintenance spares, consumables, insurance and overheads.
- 40) **"Original Project Cost "** means the actual expenditure incurred by the transmission licensee, as per the original scope of the project up to the cut-off date as admitted by the Commission;
- 41) **"Project"** includes transmission system comprising of specified transmission lines, sub - stations and associated equipment.
- 42) **"Rated Voltage"** means the manufacturer's design voltage at which the transmission system is designed to operate or such lower voltage at which the line is charged, for the time being, in consultation with the long – term transmission customer(s).
- 43) **"State Government"** means Government of Bihar.
- 44) **"State Grid Code"** means the Code specified by the Commission under clause (h) of sub-section (1) of section 86 of the Act
- 45) **"Transmission Capacity Rights"** means the right of a Transmission System User to transfer power in MW, under normal circumstances, between such points of injection and drawal as may be set out in the Bulk Power Transmission Agreement.
- 46) **"Transmission System User"** for the purpose of these Regulations means the Distribution Licensees and long-term Open Access Users, but excludes partial Open Access Users
- 47) **"Tariff"** means schedule of charges for generation, transmission, distribution and trading of electricity as well as various charges for providing open access of electricity, as determined by the commission from time to time.
- 48) **"Transformer Failure"** represents number of transformer failures of a particular capacity within the transmission system as a percentage of the total number of transformers in that capacity.
- 49) **"Trial Run" or "Trial Operation"** Trial operation in relation to a transmission system or an element thereof shall mean successful charging of the transmission system or an element thereof for 24 hours at continuous flow of power, and communication signal from

sending end to receiving end and with requisite metering system, telemetry and protection system in service enclosing certificate to that effect from State Load Dispatch Centre.

- 50) **"Transmission Licensee"** means a person who has been granted licence for intra state transmission of electricity and includes any person deemed to be a transmission licensee for intra – state transmission of electricity.
- 51) **"Transmission Service Agreement"** means an agreement, contract, memorandum of understanding or any such covenant, entered into between the transmission licensee and the long – term transmission customer for the operational phase of the project.
- 52) **"Transmission System"** means a line with associated sub stations or a group of lines inter – connected together along with associated sub -stations and the term includes equipment associated with transmission lines and sub-stations.
- 53) **"Useful life"** in relation to a unit of a Transmission System from the COD shall mean 25 years for sub-station and 35 years for transmission line.

Provided that the useful life for AC and DC substations and GIS for which Notice Inviting Tender is floated on or after 01.04.2022 shall be considered as 35 years from the date of COD

3.2 The words and expressions used and not defined in these Regulations, but defined in other Regulations or the Act, shall have the meanings assigned to them in the other Regulations or the Act respectively.

3.3 The words “Application” or “Petition” shall be interpreted synonymously.

PART-II

GENERAL PRINCIPLES

4. Multi Year Tariff Framework

4.1 The Commission shall determine the tariff for Transmission business or charges of SLDC operations under a Multi-Year Tariff framework with effect from April 1st of each financial year subject to provisions under these Regulations.

4.2 The Multi Year Tariff frameworks shall be based on the following elements, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges for Transmission Business and Fees and Charges of SLDC:

- i. Control Period, before commencement of which a forecast of the Aggregate Revenue Requirement and expected revenue from existing tariff in case of transmission licensee or Fees and Charges in case of SLDC, as the case may be, shall be submitted by the applicant and approved by the Commission;

Provided further that the performance parameters whose trajectories have been specified in these Regulations shall form the basis of projection for the Aggregate Revenue Requirement for the entire Control Period:

- ii. A detailed Business Plan based on the Operational Norms and trajectories of performance parameters specified in the MYT Regulations, for each year of the Control Period, shall be submitted by the applicant for the Commission's *approval* subject to provisions under these Regulations;
- iii. Based on the Business Plan, the applicant shall submit a petition with the forecast of Aggregate Revenue Requirement and expected revenue from existing tariff and charges for each year of the Control Period, and the Commission shall approve the transmission tariff and Fees and Charges in case of SLDC for each year of the Control Period;
- iv. The mechanism for pass-through of approved gains or losses in truing-up on account of uncontrollable factors as specified under Regulation 9 of these Regulations;
- v. The mechanism for sharing of approved gains or losses in truing-up arising out of controllable factors as specified under Regulation 10 of these Regulations;

5. Business Plan

- 5.1 The Transmission Licensee or SLDC, as the case may be, shall file a Business Plan, for the Control Period by a Petition in accordance with BERC (Conduct of Business) Regulations, 2005 and its amendments from time to time, by 15th September of the year prior to the commencement of the Control Period and accompanied by such fee payable, as specified in the BERC (Fees, Fines and Charges) Regulations, 2019 as amended from time to time.

Provided that, application for approval of the Business Plan shall not be required to be filled for the Control Period 2022-23 to 2024-25 and all requirement of business plan shall be incorporated in the MYT petition of this control period.

- 5.2 Such Business Plan shall comprise but not be limited to infrastructure requirement commensurate with load growth forecast and demand projections, capital investment plan, financing plan and physical targets.

Provided the Business Plan shall take into account schemes costing below the threshold limit to be notified separately that are to be developed by the State Transmission Utility on cost plus basis in accordance with the Tariff Policy notified by Govt. of India.

Provided that the Commission may permit SLDC to create and maintain a separate development fund for such purposes and from such sources of income, as the Commission may consider appropriate, on a Petition filed by SLDC.

Provided further that in case the Commission issues guidelines and formats, from time to time, the same shall be adhered to by the Transmission Licensee.

- 5.3 The Transmission Licensee or SLDC, as the case may be, shall make assessment of infrastructure requirement and prepare capital investment plan in accordance with BERC (Procedure for Filing Capital

Investment and Capitalization Plan) Regulations, 2018 that will spill into the year(s) under review and new projects that will commence and may be completed within or beyond the tariff period.

Provided that all the new intra-state transmission projects costing above a threshold limit to be notified separately, shall be developed through Tariff Based Competitive Bidding.

Provided also that, It is the duty of the Licensee to ensure optimization of investments to enhance efficiency, productivity and meet performance standards prescribed by the Commission.

5.4 The Commission shall approve the infrastructure requirement and preparation of capital investment plan in accordance with BERC (Procedure for Filing Capital Investment and Capitalization Plan) Regulations, 2018. The same would be considered for computation of ARR, wherein the amount of electricity transmitted by the Transmission System shall be projected considering the estimated growth plan of its Beneficiaries and any plans of new transmission system, based on network expansion plans within the State.

5.5 The Commission may also undertake a detailed review of the actual works compared with the works approved in the previous Tariff Order while approving the capital expenditure for the ensuing year.

5.6 The Transmission Licensee shall normally get prior approval of every capital investment. In case the capital expenditure is required for emergency work arisen due to unforeseen circumstances, the Licensee may take up the work upto Rs.20 Crore prior to receiving the approval from the Commission provided the emergent nature of the scheme has been certified by its Board of Directors or by the Authority delegated by the Board of Directors.

5.7 The Licensee shall submit an application showing detailed justification along with supporting documents for emergent nature of expenses within 15 days of occurrence of cause for such emergent work, seeking post facto approval by the Commission.

5.8 Beneficiaries contribution towards cost of capital asset shall be treated as capital receipt and credited in current liabilities until transferred to a separate account on Commissioning of the assets.

5.9 An amount equivalent to the depreciation charge on such assets for the year shall be appropriated from this account as income to the statement of profit and loss over the useful life of the asset.

6. Specific trajectory for certain variables

6.1 The Commission shall stipulate a trajectory while approving the Business Plan, for certain variables having regard to the reorganization, restructuring and development of the electricity industry in the State:

Provided that the variables for which a trajectory may be stipulated shall include, but are not limited to, Capitalization Schedule (Timely completion of Project as per original award without cost overrun and Time overrun), Operation & Maintenance expense norms, transmission system availability, and transmission losses.

6.2 In case the Commission has approved the business plan by 31st October of current year, the trajectory stipulated by the Commission in the order approving the Business Plan submitted by the applicant, shall be incorporated by the applicant, in its forecast of Aggregate Revenue Requirement and/or expected revenue from tariff and charges under these Regulations.

7. Annual Review of Performance and True-up

7.1 Where the Aggregate Revenue Requirement and expected revenue from tariff and charges of a Transmission Licensee or SLDC, as the case may be, are covered under a Multi-Year Tariff framework, such Transmission Licensee or SLDC shall be subject to an annual review of performance and True-up during the Control Period in accordance with these Regulations.

8. Controllable and uncontrollable factors:

8.1 The “uncontrollable factors” shall comprise but not limited to the following factors which are beyond the control of, and could not be mitigated by the applicant:

(a) Force Majeure events, such as acts of God, war, fire and natural calamities.

(b) Change in law;

(c) Taxes and Duties;

8.2 The “controllable factors” shall comprise but not limited to the following factors which are within the control of, and are attributable to the applicant:

(a) Variations in Transmission System availability;

(b) Variations in capital expenditure and Capitalization on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;

(c) Variation in Interest and Finance Charges, Return on Equity, and Depreciation on account of variation in capitalisation as specified in clause (b) above ;

(d) Variation in performance parameters;

(e) Variations in Return on Equity (RoE), depreciation and working capital requirements. However, if the Commission is satisfied that the variation in the working capital requirement is attributable to any uncontrollable factors, the same may be considered as uncontrollable factor.

(f) Variation in operation & maintenance expenses, except those attributable to directions of the Commission or to change in Government policy/law.

(g) Failure to meet the standards specified in the Standards of Performance Regulations, except where exempted;

9. Mechanism for pass-through of gains or losses on account of uncontrollable factors

9.1 The approved aggregate gain or loss to the Licensee or SLDC, as the case may be, on account of uncontrollable factors shall be a pass through, as an adjustment in the tariff of the

Licensee or SLDC, as the case may be, as specified in these Regulations and as may be determined in the Order of the Commission passed under these Regulations..

- 9.2 The Licensee or SLDC, as the case may be, shall submit such details of the variations between actual expenses incurred and revenue earned and the figures approved by the Commission along with the detailed computations and supporting documents as may be required for verification by the Commission.

10. Mechanism for sharing of gains or losses on account of controllable factors

10.1 The approved aggregate gain or loss to the Licensee or SLDC, as the case may be, on account of controllable factors shall be dealt with separately for aggregate gain and aggregate loss in the following manner:

(a) Aggregate gain:

(i) 50% of the amount of such gain shall be a pass through as an adjustment in the tariff of the Licensee or SLDC, as the case may be, as specified in these Regulations and as may be determined in the Order of the Commission passed under these Regulations;

(ii) The balance 50% of the amount of such gain shall be on account of Licensee or SLDC, as the case may be, and such amount shall be utilized at the discretion of Licensee or SLDC, as the case may be.

(b) Aggregate Loss:

(i) 50% of the amount of such loss shall normally be a pass through as an adjustment in the tariff of the Licensee or SLDC, as the case may be, as specified in these Regulations and as may be determined in the Order of the Commission passed under these Regulations, provided the Commission is satisfied that such loss is not on account of deliberate action of the Licensee or SLDC, as the case may be;

(ii) The balance 50% of the amount of such loss shall be on account of Licensee or SLDC and shall be absorbed by the Licensee or SLDC, as the case may be.

Explanation: - If the State Government is providing resource gap grant, Aggregate Loss shall be reduced by that amount for the purpose of computation of Aggregate Loss to be qualified for a pass through.

10.2 The Licensee and SLDC, as the case may be, shall submit such details of variation for sharing of approved aggregate gain or loss on account of controllable factors along with the detailed computations and supporting documents as may be required for verification by the Commission.

Explanation: For the purpose of variation for sharing of approved aggregate gain or loss on account of norms based expenditure, variation will be calculated as a difference between normative expenditure as recalculated in truing up and actual expenses booked in the audited books of accounts.

10.3 In case, there are other regulations which specifies for incentive/disincentive, gains/losses will not be shared under this regulation.

PART-III PROCEDURE

11. Procedures relating to making of an application for approval of Business plan and for determination of Tariff

11.1 An application (alongwith soft copy) for approval of the Business Plan shall be made by 15th September of the year prior to the commencement of the Control Period, in accordance with the BERC (Conduct of Business) Regulations, 2005 and its amendments from time to time, and accompanied by such fee payable, as specified in the BERC (Fees, Fines and Charges) Regulations, 2019 as amended from time to time.

Provided that the Commission may conduct a Technical Validation Session prior to admission of the Petition.

Provided further that, application for approval of the Business Plan shall not be required to be filled for the Control Period 2022-23 to 2024-25 and all requirement of business plan shall be incorporated in the MYT petition of this control period.

11.2 The Transmission Licensee in its Business Plan filings shall submit and propose the trajectory for the achievement of quality targets. The Commission shall specify the targets for each parameter. The Transmission Licensee shall submit its performance on each parameter in the form and manner specified by the Commission.

The Business Plan shall be for the entire control period and shall inter-alia, contain:

- (a) Capital Investment Plan
- (b) The appropriate capital structure and cost of financing (interest on debt) and return on equity, terms of the existing loan agreements, etc;
- (c) Operation and Maintenance (O&M) expenses: This shall include the costs estimated for the Base Year, the actual expenses incurred in the previous control period and the projected values for each year of the Control Period based on the proposed norms for O&M cost, including indexation and other appropriate mechanisms;
- (d) Depreciation: Based on the original cost of the fixed assets of the corresponding year, capitalisation schedules for each year of the Control Period and at the rate not exceeding the rate specified by the Central Electricity Regulatory Commission;
- (e) Performance Targets: A set of targets proposed for controllable items such as availability of transmission system, transmission losses, transformer failure rate, and any other parameters for quality of supply. The targets shall be consistent with the Capital Investment Plan proposed by the Transmission Licensee;
- (f) Proposals for Non-Tariff Income with item-wise description and details;
- (g) Proposals in respect of income from Other Business;

(h) Other Information: This shall include any other details considered appropriate by the Transmission Licensee for consideration during determination of tariff; and

11.3 An application (alongwith soft copy) for determination of tariff and charges shall be made by 15th November every year, for Truing up of expenses of previous years, for Annual Performance Review (APR) of the Aggregate Revenue Requirement (ARR) for the current year and determination of ARR and transmission tariff or SLDC charges for the ensuing years of the control period. The application should contain the data relating to each item of the ARR supported with the information/data in the formats Form no-SI to Form no-P12 appended to these Regulations, and accompanied by such fees as may be specified under the BERC (Fees, Fines and Charges) Regulations, 2019 as amended from time to time. All the information as required in the formats appended to these Regulations along with justification shall be provided in the main petition.

Provided that the Commission may require submission of additional information/data required for determination of ARR and tariff.

11.4 The filings for Transmission Tariff shall inter-alia contain but are not limited to the following:

- (a) The Transmission System or network usage forecast for each year of the Control Period, consistent with the Business Plan;
- (b) Proposals for transmission tariff design for each year of the Control Period, including the losses to be charged and the procedure thereof;
- (c) Proposal for reactive energy charges;
- (d) Expected Revenue from the Licensed Business, Non-Tariff Income and income from Other Business and other matters considered appropriate by the Transmission Licensee.

11.5 The petition for determination of tariff or SLDC charges shall be accompanied by information for the previous year, current year (RE) and the ensuing years of the entire control period.

Provided that the application shall be accompanied where relevant, by a detailed tariff revision proposal and how such revision would meet the gap, if any, in Aggregate Revenue Requirement for each year of the Control Period.

Provided further that the information for the previous year shall be based on audited accounts and in case audited accounts for previous year are not available, audited accounts for the immediately preceding year should be filed along with provisional books of annual (regulatory) accounts for the previous year adopted by the Board of Directors of the licensee company or SLDC, as the case may be.

11.6 The Transmission Licensee or SLDC as the case may be shall along with the aforesaid petition submit a statement on the status of compliance of directives, if any, issued by the Commission in its last tariff order.

11.7 The Commission may seek clarification and additional information on inadequacies in the application, if any, within 14 days or

as may be practicable, of filing of the application for approval of the Business Plan and application for determination of tariff, as the case may be.

11.8 The Transmission Licensee shall respond within the next 10 days to the Commission with all clarification and information as required.

11.9 Upon receipt of a complete application accompanied by all requisite information, particulars and documents in compliance with all the requirements specified in these Regulations, the application for approval of the Business Plan and application for determination of tariff, as the case may be, shall be deemed to be received and The Commission shall admit the application for approval of the Business Plan and application for determination of tariff, as the case may be, within seven days or as may be required, of submission of response to the clarifications, if any, by the Transmission Licensee or SLDC, as the case may be.

11.10 The Commission or the Secretary or the designated Officer shall intimate to the applicant with the abridged form of application for publication of public notice in the daily newspapers. In case of non-submission or delay in submission of additional information, the Commission may take suo-motu decision to formulate this abridged form of application as it deem appropriate.

11.11 The applicant shall, within three (3) days of the intimation given to him in accordance with Regulation 11.10, publish a notice inviting suggestions and objections from the public, in at least two (2) English and two (2) Hindi language daily newspapers widely circulated in the area to which the application pertains, outlining the proposed Business Plan or the proposed ARR and tariff, as the case may be, and such other matters as may be stipulated by the Commission.

Provided that the applicant shall make available a hard copy of the complete application, to any interested party, at such locations and at such rates as may be stipulated by the Commission:

Provided further that the applicant shall also put up on its internet website, in downloadable spreadsheet format showing detailed computations, the application made to the Commission along with all regulatory filings, information, particulars and documents in the manner so stipulated by the Commission:

Provided further that the web-link to the information mentioned in the second proviso above shall be easily accessible, archived for downloading and shall be prominently displayed on the applicant's internet website:

Provided also that the applicant may not provide or put up any such information, particulars or documents, which are confidential in nature, with the prior approval of the Commission.

Explanation – for the purpose of this Regulation, the term “downloadable spreadsheet format” shall mean one (or multiple, linked) spreadsheet software files containing all assumptions, formulae,

calculations, software macros and outputs forming the basis of the application.

11.12 The procedural aspects pertaining to the Petition contained in this Regulation shall apply only to such an extent as may be required by the Commission having regard to the circumstances of an individual case, to,-

(a) a Petition filed by a Transmission Licensee under Section 36 of the Act;

(b) a Petition filed by the SLDC under section 32 of the Act

11.13 Notwithstanding anything contained in these Regulations, in case of delay/ non-submission of the application for approval of the Business Plan and application for determination of tariff, as the case may be, the Commission may initiate suo-motu proceedings mandating the filing of the said applications.

Provided that in the event of the licensee not filing the application despite the aforesaid proceeding, the Commission may on its own, decide the tariff based on previous year's tariff details and after incorporating suitable adjustments. However before issuing tariff order under such circumstances, comments/ suggestions/ objections from the public and stake holders including the licensee will be invited and same will be considered for the tariff order.

Provided further that the Commission may also pass directions under Section 129 and/or Section 142 of the Act, if required.

12. Order approving the Business Plan and Tariff Order

12.1 An Order approving with such modifications or such conditions as may be specified in that order or rejecting the Business Plan shall, as far as practicable, be issued before the filing of tariff petition separately or with the tariff order as the Commission may deem fit and practicable.

12.2 The Commission shall, within one hundred and twenty (120) days from receipt of a complete application for determination of ARR and tariff and after considering all suggestions and objections received from the public and after hearing all stakeholders and general public:-

- (a) issue a Tariff Order accepting the application with such modifications or such conditions as may be specified in that Order;
- (b) reject the application for reasons to be recorded in writing, if such application is not in accordance with the provisions of the Act and the Rules and Regulations made there under or the provisions of any other law for the time being in force:

12.3 An applicant shall be given a reasonable opportunity of being heard before rejecting its application referred to under regulation 12.1 and 12.2 above.

12.4 The applicant shall publish the tariff approved by the Commission within seven days of issue of tariff order in at least two (2) English and two (2) Hindi daily newspapers having wide circulation in the area of supply of the applicant and shall put up the approved tariff or charges on its internet website.

12.5 The tariff so published shall be in force from the date specified in the said Order and shall, unless amended or revised, continue to be in force for such period as may be stipulated therein.

13. True-Up and Annual Performance Review

The Commission shall True-Up expenses of the previous year either as part of the Tariff order or issue Order/s for True-Up of expenses preceding the Tariff order of ensuing year.

- (a) An order for True-Up of expenses shall be issued on annual basis.
- (b) An order for True-Up of expenses shall be on the basis of expense estimates made in the beginning of the year under consideration, actual expenses booked in the audited books of accounts of the Transmission Licensee or SLDC, as the case may be, for the year, and after prudence check of data by the Commission.
- (c) Where audited books of account are not available at the time of true-up, provisional books of annual (regulatory) accounts duly approved by the Board of Directors of the applicant company shall be used for the provisional True-up process.
- (d) The Commission shall undertake review of estimates of expenses for the current year as a part of the tariff order on the basis of the actual expenses incurred during the period April – September of the current year and corresponding figures in the order for Annual Revenue Requirement (ARR) of the current year approved by the Commission.
- (e) Estimates of expenses for the ensuing year shall be on the basis of corresponding figures in the order for True-up of expenses of the previous year and Annual Performance Review or Tariff Order of the current year, as the Commission may consider reasonable and deem fit.
- (f) Notwithstanding anything contained in regulation 4 of these Regulations, the Revenue gap/surplus arising out of Truing up shall be considered by the Commission while determining the ARR of ensuing year(s). While approving adjustments towards revenue/expenses in future years, arising out of Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. However the revised estimated gap/surplus as a result of APR may or may not be passed in the ARR of ensuing year.

14. Adherence to Tariff Order

14.1 If a Transmission Licensee recovers a price or charge exceeding the tariff determined under Section 62 of the Act and in accordance with these Regulations, the excess amount shall be payable to the person who has paid such price or charge, along with interest equivalent to the Bank Rate of the Reserve Bank of India without prejudice to any other liability that may be incurred by such Transmission Licensee.

14.2 The Transmission Licensee shall submit periodic returns as may be required by the Commission, containing operational and cost

data to enable the Commission to monitor the implementation of its Order.

PART-IV NORMS OF OPERATION

15. Charges for Auxiliary Energy Consumption in the Sub – Station

The charges for auxiliary energy consumption in the Sub Stations for the purpose of air – conditioning, lighting, technical consumption etc shall be borne by the transmission licensee as part of normative operation and maintenance expenses.

Provided that for consumption in the Sub Stations for the purpose of air – conditioning, lighting, technical consumption etc., transmission licensee shall get an electric connection from the concerned distribution licensee and pay charges to the distribution licensee as per the applicable retail tariff.

16. Normative Annual Transmission System Availability Factor (NATAF):

16.1 The Normative Annual Transmission System Availability Factor for recovery of full transmission charges shall be as under:

(a) For full recovery of Annual Transmission Charges-		
(i)	AC System	98%
(ii)	HVDC System	95%
(b) For Incentive consideration-		
(iii)	AC System	98.5%
(iv)	HVDC System	97.5%

Provided that recovery of full annual transmission charges below the target availability shall be on a pro rata basis. At zero availability, no transmission charges shall be payable

16.2 The actual availability shall be calculated in accordance with the procedure provided in Appendix-II to these Regulations and shall be certified by the State Load Despatch Centre (SLDC) as per the format specified in **Appendix -I** of these Regulations.

16.3 The Transmission Licensee shall be entitled to incentive on achieving annual availability beyond the target availability, in accordance with the following formula :-

Incentive = Annual Transmission Charges x (Annual availability achieved – Target Availability) / Target Availability;

Where,

Annual transmission Charges shall correspond to Aggregate Revenue Requirement for each year of the Control Period for the particular Transmission Licensee within the State:

Provided that no incentive shall be payable above the availability of 99.75 % for AC system and 98.5 % for HVDC system:

17. Quality of Supply

17.1 The Commission shall monitor the following Quality of Supply parameters during the Control Period:

(a) Transmission System Availability

(b) Transformer Failure,

18. Safety Standards

18.1 The Transmission Licensee shall develop a Safety Manual and follow procedures to maintain at least minimum safety standards during construction, operation, etc. in line with the provisions of Section 53 of the Act

19. Additional Capitalisation:

(1) The following capital expenditure which is within the original scope of work and actually incurred after the date of commercial operation and upto the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) deferred liabilities
- (ii) works deferred for execution
- (iii) Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:
 - a) Transmission line - 1.00%
 - b) Transmission Sub-station (Green Field) - 4.00%
 - c) Transmission Sub-station (Brown Field) - 6.00%
 - d) Series Compensation devices and HVDC Station - 4.00%
 - e) Gas Insulated Sub-station (GIS) - 5.00%
 - f) Communication system- 3.50%

Provided that once the project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the project at the time of truing up.

- (iv) liabilities in connection with implementation of award of arbitration or compliance of the order or decree of a court, and
- (v) on account of change in law

Note: (a) original scope of work along with estimates of expenditure shall be submitted to the Commission along with application for tariff.

(b) a list of the deferred liabilities and works deferred for execution shall also be submitted along with the application for determination of tariff after the date of commercial operation of the transmission system.

(2) Subject to clause (3) of this regulation, the capital expenditure of the following nature actually incurred after the cut-off date may be admitted by the Commission, subject to prudent check.

(i) deferred liabilities relating to work / services within the original scope of work

(ii) liabilities in connection with implementation of award of arbitration or compliance of an order or decree of a court

(iii) on account of a change in law, and

(iv) any additional works / services which have become necessary for efficient and successful operation of the project, but not included in the original project cost.

(3) Any expenditure incurred on minor items / assets bought after the cut off date like tools and tackles, personal computers, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, TV, washing machine, heat convectors, mattresses, carpets etc. shall not be considered for additional capitalisation for determination of tariff with

effect from notified date of the tariff regulations by the Commission as per Regulation 1.2

Note: *The list of items is illustrative but not exhaustive.*

(4) Impact of additional capitalisation on tariff, may be considered during truing up of each financial year of the control period.

Note:

(1) *Any expenditure admitted on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt equity ratio specified in these Regulations.*

(2) *Any expenditure on replacement of old asset shall be considered after writing off the entire value of the original asset from the original capital cost.*

(3) *Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced on normative debt – equity ratio specified in these Regulations.*

(4) *Any expenditure admitted by the Commission for determination of tariff on renovation and modernisation or life extension shall be serviced on normative debt – equity ratio specified in these Regulations after writing off the original amount of the replaced asset from the original capital cost.*

PART-V

FINANCIAL PRINCIPLES

20. ARR for Transmission Business

20.1 Financial Prudence-

The Transmission Licensee or SLDC, as the case may be, shall manage its finances in an optimum and prudent manner

Provided that the Commission may disallow a part of the Aggregate Revenue Requirement, as an efficiency measure, if it finds the exercise of such prudence to have been deficient

Provided also that, in case its payment obligations to other entities are not regularly met, the Transmission Licensee or SLDC, as the case may be, shall provide justification for such shortfall with reference to its cash flow statement.

20.2 The financial prudence with respect to capital expenditure shall be assessed in terms of the following parameters:—

(a) mechanism put in place for monitoring the physical progress of projects with respect to their original schedule;

(b) optimum drawal of loans in accordance with the physical progress of the capital expenditure schemes, and efficient utilisation of such loans;

(c) in case the actual capital expenditure or capitalisation exceeds 10% of that approved by the Commission, the Transmission Licensee or SLDC, as the case may be, shall submit detailed justification for such excess along with its Petition for True-up ;

(d) in case any scheme has not been commenced during the year despite the Commission's approval, detailed justification shall be submitted along with the Petition for True-up.

20.3 The Aggregate Revenue Requirement for the Transmission Licensee or SLDC business, as the case may be, for each year of the Control Period shall contain but not limited to the following items:

- (a) Operation and Maintenance expenses;
- (b) Return on Equity;
- (c) Depreciation
- (d) Interest and finance charges on loan capital
- (e) Interest on working capital
- (f) Contingency Reserve;
- (g) Bad debts, if any
- (h) Non-Tariff Income
- (i) Income from Other Business.
- (j) Revenue from short-term transmission charges

21. Operation and Maintenance Expenses

- (a) The Commission shall stipulate a separate trajectory of norms for each of the components of O&M expenses viz., Employee cost, Repair and Maintenance (R&M) expense and Administrative and General (A&G) expense.

Provided that such norms may be specified for a specific Transmission Licensee or a class of Transmission Licensees.

- (b) Norms shall be defined in terms of number of personnel per ckt/km (for different categories of transmission lines for e.g. 400 KV, 220 KV, 132 KV etc. Lines) and number of personal per bay (for different categories of bay for e.g. 400 KV, 220 KV, 132 KV etc. Bays) along with annual expenses per personnel for Employee expenses; combination of A&G expense per personnel and A&G expense per substation for A&G expenses and R&M expense as percentage of gross fixed assets for estimation of R&M expenses.
- (c) One-time expenses such as expense due to change in accounting policy and arrears paid due to pay commission recommendation shall be excluded from the norms in the trajectory.
- (d) The unforeseen expenses beyond the control of the Transmission Licensee such as pay revision, shall be excluded from the norms in the trajectory.
- (e) The One-time expenses and the expenses beyond the control of the Transmission Licensee shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.
- (f) The norms in the trajectory shall be specified over the control period with due consideration to productivity improvements.
- (g) The norms shall be determined at constant prices of base year and escalation on account of inflation shall be over and above the baseline.

Provided that for the purpose of escalation based on Wholesale Price Index(WPI_n) and Consumer Price Index(CPI_n), WPI_n is to be

computed based on the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past three financial years (including the year of Truing-up) as per the Office of Economic Advisor Ministry of Commerce & Industry Government of India and CPI_n is to be computed based on the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the respective past three financial years (including the year of Truing-up) as per the Labour Bureau Government of India, at the time of filing of Petition.

Provided that in case the average yearly inflation derived based on the monthly CPI and WPI indices is negative for a particular year, the same will be excluded from the computation of yearly inflation

- (h) The Transmission Licensee specific trajectory of norms shall be identified by the Commission on the basis of absolute and relative analysis.
- (i) In absolute analysis, Transmission Licensee's audited accounts of operations for last three years, expenses claimed for control period, historically approved cost, and prudence check shall be used by the Commission to estimate values of norms.
- (j) In relative analysis, performance parameters of other Transmission Licensees within the same state or in other states, shall be considered by the Commission to estimate norms.

Provided that other Transmission Licensees so chosen shall have similar profile as that of the Transmission Licensee under consideration in terms of consumer mix, type of license area (city, state, etc.) type of substation, transmission networks, etc.

- (k) Suitable average of outcomes of absolute and relative analysis shall be taken by the Commission to fix the norms over the control period for the Transmission Licensee.

21.1 Employee Cost

Employee cost shall be computed as per the approved norm escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Transmission Licensee and one time expected expenses, such as recovery/adjustment of terminal benefits, implications of pay commission, arrears and Interim Relief, governed by the following formula:

$$EMP_n = (EMP_b * CPI \text{ inflation}) + \text{Provision}$$

Where:

EMP_n : Employee expense for the year n

EMP_b : Employee expense as per the norm

CPI inflation: is the average increase in the Consumer Price Index (CPI) for immediately preceding three years

Provision: Provision for expenses beyond control of the Transmission Licensee and expected one-time expenses as specified above.

Till the norms are specified by the Commission the employee cost shall be determined on the basis of actual historical cost.

21.2 Repairs and Maintenance (R&M) Expense

Repairs and Maintenance expense shall be calculated as percentage (as per the norm determined) of Opening Gross Fixed Assets excluding land cost for the year governed by following formula:

$$R\&M_n = K_b * GFAn$$

Where:

R&M_n : Repairs & Maintenance expense for nth year

GFAn : Opening Gross Fixed Assets for nth year

K_b : Percentage point as per the norm

21.3 Administrative and General (A&G) Expense

A&G expense shall be computed as per the norm escalated by wholesale price index (WPI) and Consumer Price Index (CPI) in the ratio 60:40 and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses, and shall be governed by following formula:

$$A\&G_n = (A\&G_b * WPI \text{ inflation}) + \text{Provision}$$

Where:

A&G_n: A&G expense for the year n

A&G_b: A&G expense as per the norm

WPI inflation: is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years

Provision: Cost for initiatives or other one-time expenses as proposed by the Transmission Licensee and validated by the Commission. Till the norms of A&G expenses is specified by the Commission, the actual historical cost will be considered for determination of A&G expenses.

22. Return on Equity

- (a) Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower:

Provided that assets funded by beneficiary contribution, capital subsidies/ grants and corresponding depreciation shall not form part of the capital base. Actual equity invested in the Transmission Licensee or SLDC, as the case may be, as per book value shall be considered as perpetual and shall be used for computation in this Regulation:

Provided further that the premium if any raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the Scheme, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the transmission system, and are within the ceiling of 30% of capital cost approved by the Commission.

- (b) The return on the equity invested shall be allowed from the date of start of commercial operation and after put to use:
- (c) Return on equity shall be computed at the rate of 15.5% for the project which is commissioned w.e.f. 01.04.2015 and further incentive equivalent to 0.5% will be allowed in the form of RoE, if the project is completed within schedule as per the Annexure A or

original schedule period as the case may be. However, Return on Equity for the project commissioned prior to 01.04.2015 shall be allowed at the rate of 14%.

23. Depreciation

- (i) Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year. No advance shall be granted against depreciation.
- (ii) Depreciation shall not be allowed on assets funded by capital subsidies, beneficiary contributions or grants.
- (iii) Depreciation shall be calculated annually on the basis of assets capitalised and put to use based on the straight line method over the useful life of the asset and at the rate not exceeding the rate specified by the Central Electricity Regulatory Commission from time to time.

The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset. The Transmission Licensee or SLDC, as the case may be, shall submit separate detail of fully depreciated asset along with year of commissioning and year of attaining ninety percent depreciation with the tariff petition.

Provided that freehold land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

Provided further that the cost of lease hold land shall be amortised evenly within the leased period.

- (iv) The original capital cost of the asset shall include Additional Capitalisation on account of Foreign Exchange Rate Variation as allowed by the Government / Bihar Electricity Regulatory Commission.
- (v) Depreciation shall be chargeable from the first year of operation of the asset. For part of the year, depreciation shall be charged on pro rata basis.
- (vi) A provision of replacement of assets shall be made in the capital investment plan.
- (vii) The licensee(s) shall submit certified copy of the Asset Register with the list of fully depreciated Transmission lines, substation, transformers, etc. along with the details of disposed off assets and amount received therefore with the tariff petition.

24. Interest and finance charges on loan capital

- (a) The Transmission Licensee or SLDC, as the case may be, shall provide detailed loan-wise, project wise and utilization-wise details of all the loans.
- (b) If the equity actually deployed is more than 30 % of the capital cost, equity in excess of 30 % shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loan:

- (c) Actual loan or normative loan, if any, shall be referred as gross normative loan in this Regulation.
- (d) The normative loan outstanding as of 1st April of control period shall be computed by deducting the cumulative repayment as approved by the Commission (basis as mentioned below) up to 31st March of current period (a year before control period) from the gross normative loan.
- (e) The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year.
- (f) Notwithstanding any moratorium period availed by the Transmission Licensee or SLDC, as the case may be, the repayment of the loan shall be considered from the first year of the control period as per annual depreciation allowed.
- (g) The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the control period, in accordance with terms and conditions of relevant loan agreements, or bonds or non-convertible debentures:

Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable.

Provided further that if no actual loan is outstanding but normative loan is still outstanding and the last available weighted average rate of interest is also not available, rate of interest equal to the State Bank (one-year tenor) Marginal Cost of Funds-based Lending Rate ('MCLR') shall be applicable.

Provided further that the interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest:

Provided also that exception shall be made for the existing loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects:

- (h) The Transmission Licensee or SLDC, as the case may be, shall make every effort to refinance the loan as long as it results in net benefit to the beneficiaries.

Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Transmission Licensee or SLDC and the beneficiaries.

Provided further that the Transmission Licensee shall submit the calculation of such benefit to the Commission for its approval.

- (i) The Transmission Licensee shall enable tracking of the loans converted into grants under schemes like BRGF, PSDF, APDRP, R-APDRP, RGGVY, DDUGVY, RSVP, etc or any other loan from the Central or State Government by providing information and data regularly to the Commission, for enabling the Commission to

recover from Transmission Licensee or SLDC, as the case may be, the amount of interest on loans which have been passed on to the beneficiaries in the earlier years and have been converted into grant subsequently so that the recovered amount is passed on to the beneficiaries.

- (j) Addition to loan during the year for interest purpose will be restricted to the quantum of assets capitalized and put to use.
- (k) The excess interest during construction on account of time and/or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission. The transmission licensee shall endeavour to adhere the time schedule for various transmission system in accordance with Annexure-A appended for these regulations.

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Transmission Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:

Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

- (l) The above interest computation shall exclude interest on loan amount, normative or otherwise, to the extent of capital cost funded by Consumer Contribution, Deposit Works, Grants or Capital Subsidy.

25. Interest during Construction (IDC), Incidental Expenditure during Construction (IEDC):

(A) Interest during Construction (IDC)

(i) Interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds upto Scheduled Date of Commercial operation (SCOD).

(ii) In case of additional costs on account of IDC due to delay in achieving the SCOD, the SLDC or the transmission licensee as the case may be, shall be required to furnish detailed justifications with supporting documents for such delay including prudent phasing of funds.

Provided that if the delay is not attributable to the SLDC or the transmission licensee as the case may be, and is due to uncontrollable factors as specified in Regulation 8 of these regulations, IDC may be allowed after due prudence check.

Provided further that only IDC on actual loan may be allowed beyond the SCOD to the extent, the delay is found beyond the control of SLDC or the transmission licensee, as the case may be, after due prudence and taking into account prudent phasing of funds.

(B) Incidental Expenditure during Construction (IEDC)

(i) Incidental expenditure during construction shall be computed from the zero date and after taking into account pre-operative expenses up to Scheduled Date of Commercial operation (SCOD).

Provided that any revenue earned during construction period up to SCOD on account of interest on deposits or advances, or any other receipts may be taken into account for reduction in incidental expenditure during construction.

(ii) In case of additional costs on account of IEDC due to delay in achieving the SCOD, the transmission licensee or SLDC as the case may be, shall be required to furnish detailed justification with supporting documents for such delay including the details of incidental expenditure during the period of delay and liquidated damages recovered or recoverable corresponding to the delay.

Provided that if the delay is not attributable to the transmission licensee or SLDC as the case may be, and is due to uncontrollable factors as specified in Regulation 8, IEDC may be allowed after due prudence check.

Provided further that where the delay is attributable to an agency or contractor or supplier engaged by the transmission licensee or SLDC, the liquidated damages recovered from such agency or contractor supplier shall be taken into account for computation of capital cost.

(iii) In case the time over-run beyond SCOD is not admissible after due prudence, the increase of capital cost on account of cost variation corresponding to the period of time over run may be excluded from capitalization irrespective of price variation provisions in the contracts with supplier or contractor of the transmission licensee or SLDC.

26. Interest on working capital

(a) The Transmission Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:

(i) Receivables equivalent to two (2) month of transmission charges calculated on target availability level.

(ii) O&M Expenses of one (01) month.

(iii) Maintenance spares @ 40% of R&M expenses for one month.

Provided that for the purpose of Truing-up for any year, the working capital requirement shall be re-computed on the basis of the values of revised normative Operation & Maintenance expenses and actual Revenue from Transmission Charges as reflected in the Audited Accounts excluding incentive, if any, and other components of working capital approved by the Commission in the Truing-up before sharing of gains and losses.

Less:

(iv) Return on equity and contribution to contingency reserves equivalent to two months.

(v) Amount of security deposits from Transmission System users, if any, held during the year except the security deposits held in the form of Bank Guarantee from Transmission System Users.

- (b) Interest on working capital shall be on normative basis and rate of interest shall be equal to the State Bank (one-year tenor) Marginal Cost of Funds-based Lending Rate ('MCLR') as of the date on which petition for determination of tariff is filed plus 150 basis points. The rate of interest for the purpose of Truing-up shall be the weighted average MCLR of the concern Financial Year plus 150 basis points.
- (c) Interest shall be allowed on the amount held as security deposit (except the security deposit held in the form of Bank Guarantee) from Transmission System Users at the Bank Rate (RBI Base Rate) as at the date on which the application for determination of tariff is filed. The interest allowed shall be subject to true up at weighted average Bank Rate of the concern Financial Year.
- (d) If the State Government is providing resource gap grant and/or subsidy, the working capital shall be reduced by two months equivalent of that amount.

27. Tax on Return on Equity

- 1) The base rate of return on equity as allowed by the Commission under Regulation 22 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned transmission licensee or SLDC, as the case may be. The actual tax on income from other business including deferred tax liability (i.e. income on business other than business of transmission or SLDC, as the case may be) shall not be considered for the calculation of effective tax rate.
- 2) Rate of return on equity shall be rounded off to two decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where "t" is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-SLDC or non-transmission business, as the case may be, and the corresponding tax thereon. In case of licensee/SLDC paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

Illustration:-

(i) In case of the licensee paying Minimum Alternate Tax (MAT) @ 20.96% including surcharge and cess:

Rate of return on equity = $15.50 / (1 - 0.2096) = 19.61\%$

(ii) In case of licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from the licensee business for FY 2017-18 is Rs 1000 crore.

(b) Estimated Advance Tax for the year on above is Rs 240 crore.

(c) Effective Tax Rate for the year 2017-18 = Rs 240 Crore/Rs 1000 Crore = 24%

(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.39\%$

(3) The Licensee or SLDC, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2022-23 to 2024-25 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the Licensee or SLDC as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries on year to year basis.

28. Contribution to Contingency Reserve

(a) If the Transmission Licensee or SLDC, as the case may be, has made an appropriation to the Contingency Reserve, a sum not more than 0.5 percent of the original cost of fixed assets at the beginning of the year shall be allowed annually towards such appropriation in the calculation of ARR.

Provided that where the amount of such Contingency Reserves exceeds five (5) per cent of the original cost of fixed assets, no further contribution shall be allowed.

Provided further that such contribution shall be invested in securities authorised under the Indian Trusts Act, 1882 within a period of six months of the close of the Year.

(b) The Contingency Reserve shall not be drawn upon during the term of the license except to meet such charges as may be approved by the Commission, such as following:

- (i) Expenses or loss of profits arising out of accidents, strikes or circumstances which the management could not have prevented;
- (ii) Expenses on replacement or removal of plant or works other than expenses required for normal maintenance or renewal;
- (iii) Compensation payable under any law for the time being in force and for which no other provision is made:

Provided that such drawal from contingency reserve shall be computed after making due adjustment for any other compensation that may have been received by the Licensee as part of an insurance cover:

(c) No diminution in the value of contingency reserve as mentioned above shall be allowed to be adjusted as a part of tariff.

29. Bad and Doubtful Debts :

Bad and Doubtful Debts shall be allowed as a legitimate business expense provided the transmission licensee actually identifies and writes off bad debts as per the transparent policy approved by the Commission. In case there is any recovery of bad debts already written off, the recovered bad debt will be treated as other income as an uncontrollable item.

30. Delayed Payment Charge and Interest on Delayed Payment:

In case the payment of bills of transmission charges or SLDC Fees and Charges by the Beneficiary, as the case may be, is delayed beyond a period of 60 days from the date of billing, Delayed Payment Charge at the rate of 1.25% per month on the billed amount shall be levied for the period of delay by the Transmission Licensee or SLDC, as the case may be, notwithstanding anything to the contrary as may have been stipulated in the Agreement or Arrangement with the Beneficiaries or as applicable in the Electricity (Late Payment Surcharge) Rules, 2021 in case of Power Purchase Agreements, Power Supply Agreements and Transmission Service Agreement.

31. Non-Tariff Income

(i) All incomes being incidental to electricity business and derived by the Licensee from sources, including but not limited to profit derived from disposal of assets, rents, late payment surcharge, income from investments other than contingency reserves, miscellaneous receipts from the Beneficiaries, income to Licensed business from the Other Business of the Transmission Licensee or SLDC, as the case may be, shall constitute Non-Tariff Income of the Licensee.

Provided that the interest earned from investments made out of Return on Equity corresponding to the regulated Business shall not be included in Non-Tariff Income.

(ii) The amount received by the Licensee on account of Non-Tariff Income shall be deducted from the Aggregate Revenue Requirement in calculating the net revenue requirement of such Licensee.

32. Income from Other Business

Where the Transmission Licensee is engaged in any other business under Section 41, the income from such business will be deducted from the Aggregate Revenue Requirement in calculating the revenue requirement of the Licensee in the manner and in proportion as may be specified by the Commission in BERC (Treatment of Income of Other Businesses of Transmission Licensees and Distribution Licensees) Regulations, 2013 and its amendments from time to time.

Provided that the Licensee shall follow a reasonable basis for allocation of all joint and common costs between the Transmission Business and the Other Business and shall submit the Allocation Statement as approved by the Board of Directors to the Commission along with the application for determination of tariff;

Provided further that where the sum total of the direct and indirect costs of such Other Business exceed the revenues from such Other Business or for any other reason, no amount shall be allowed to be added to the Aggregate Revenue Requirement of the Transmission Licensee on account of such Other Business.

33. Annual Transmission Charges (ATC)

33.1 The annual Transmission charges of the transmission system shall be computed on annual basis, in accordance with norms contained in these regulations, aggregated as appropriate, and recovered on monthly basis as transmission charge from the users.

33.2 The Transmission charge (inclusive of incentive/disincentive) for AC system payable for a calendar month shall be:

$$\text{ARR} \times (\text{NDM}/\text{NDY}) \times (\text{TAFM}/\text{NATAF})$$

Where;

NATAF= 98%

NDM = Number of days in the month

NDY = Number of days in the year

TAFM = Transmission System availability factor for the month, in percent computed in accordance with Appendix-II.

34. Sharing of charges for Intra-State Transmission Network

34.1 The Aggregate Revenue Requirement of the Transmission Licensee, as approved by the Commission, shall be shared by all long-term users and medium-term users of the transmission system on monthly basis in the ratio of their respective contracted transmission capacities to the total contracted transmission capacity, in accordance with the following formula:

$$\text{TCn} = (\text{Transmission ARR net of incentive/disincentive}) \times (\text{NDM}/\text{NDY}) \times \text{CCn}/\text{SCC}$$

Where,

TCn = transmission charges for the month payable by the nth long-term user or medium-term user of the transmission system;

Transmission ARR = Aggregate Revenue Requirement of the Transmission Licensee, determined in accordance with Regulation 68 of these Regulations;

CCn = capacity contracted in MW by the nth long-term user or medium-term user of the transmission system during the month;

SCC = sum of capacities contracted in MW by all long-term users and medium-term users of the transmission system during the month:

NDM=Number of days in the month

NDY=Number of days in the year

Provided that the TCn shall be payable on monthly basis by each long-term user or medium-term user of the transmission system and shall be collected by the State Transmission Utility (STU).

35. Sharing of SLDC Charges

35.1 The SLDC Charges payable by the Transmission System Users shall be computed in accordance with the following formula:-

$$\text{SLDC Charges payable for a month } \text{SCn} = (\text{SC}/12) \times (\text{ACn}/\text{SACn})$$

Where, SCn= SLDC charge payable by Transmission System users

SC= Approved SLDC Aggregate Revenue Requirement for the year

ACn= Actual installed capacity of nth Transmission System users in case of generating stations including RE generators /long term and medium term contracted capacities in case of sellers/aggregated allocated capacity and contracted capacity in case of distribution licensee/long term contracted capacity in case of buyer.

SACn= Sum of actual installed capacity of nth Transmission System users in case of generating stations including RE generators (within Bihar), long term and medium term contracted capacities in case of

sellers, aggregated allocated capacity and contracted capacity in case of distribution licensee and long term contracted capacity in case of buyer.”

35.2 The SLDC Charges approved for the Year shall be equally spread over the 12 months of the Year and SLDC Charges per MW per month shall be computed by SLDC accordingly.

35.3 Notwithstanding anything contained in these regulations, the Commission after conducting study and due regulatory process may notify the revised sharing and recovery of annual transmission charges of the transmission licensee.

36. Short-term bilateral transactions and short-term collective transactions

36.1 For short-term bilateral transactions and short-term collective transactions through power exchanges, the transmission tariff shall be denominated in Rs/kWh and shall be:

$$T_c = \text{ARR} / E_i$$

Where E_i = total energy input into the intra-State transmission system during the financial year.

36.2 The revenue from short-term open access charges for each yearly period (t) of Control Period shall be taken to be same as that prevalent during the yearly period one year before the commencement of the Control Period. However, the adjustments due to variation in actual revenue from short-term open access charges shall be undertaken during annual truing up.

37. Separation of Transmission and SLDC functions

37.1 The Transmission Licensee shall separate its business into transmission and SLDC functions, and segregate its accounts between these two businesses, once the accounts of these two businesses are segregated SLDC shall file a separate application for determination of its fee and charges in accordance with these regulations.

Till the segregation of the accounts is completed, the Transmission Licensee shall submit an Allocation Statement that contains the apportionment of costs and revenues to that business. The Allocation Statement, approved by the Board of Directors of the Licensee, shall be accompanied with an explanation of the methodology for apportionment which should be consistent over the Control Period.

37.2 SLDC charges shall be payable by various utilities as may be determined by the Commission in accordance with these Regulations.

Provided that the RLDC Fees and Charges payable by the SLDC in accordance with the relevant Orders issued by the Central Electricity Regulatory Commission from time to time shall be allowed to be recovered by the SLDC through the Fees and Charges as approved by the Commission.

Provided further that, the ERPC Charges payable to the ERPC's Secretariat shall be allowed to be recovered by the SLDC through the Fees and Charges as approved by the Commission.

37.3 The SLDC shall have to produce documentary proof towards payment of such Charges at the time of Truing up.

Provided that any variation between the approved RLDC Fees and Charges and ERPC Charges and that actually paid by the SLDC shall be considered during the true-up as per audited accounts, subject to prudence check and any other factor considered appropriate by the Commission.

38. Incentive/Disincentive

38.1 The Transmission Licensee shall be entitled to incentive/disincentive on account of deviation from target availability set by commission. The transmission charges referred to in Regulation 33 of these Regulations are inclusive of such incentives and disincentives on account of availability of system.

38.2 Incentive shall be shared by the long-term and medium term customers in the ratio of their respective contracted transmission capacities to the total contracted transmission capacity.

39. Rebate

(1) For payment of bills of the transmission licensee through letter of credit on presentation or through NEFT/RTGS within a period of 2 days of presentation of bills by the transmission licensee, a rebate of 2% shall be allowed.

(2) Where payments are made on any day after 2 days and within a period of 30 days of presentation of bills by the transmission licensee, a rebate of 1% shall be allowed.

40. Late Payment Surcharge: In case the payment of any bills for charges payable under these Regulations is delayed by a beneficiary(ies) beyond a period of 60 days from the date of billing a late payment surcharge at the rate of 1.25% per month on billed amount shall be levied for the period of delay by the Transmission Licensee, notwithstanding anything to the contrary as may have been stipulated in the Agreement or Arrangement with the Beneficiaries or as applicable in the Electricity (Late Payment Surcharge) Rules, 2021 in case of Power Purchase Agreements, Power Supply Agreements and Transmission Service Agreement.

**PART-VI
MISCELLANEOUS**

41. Power to amend

The Commission may, at anytime, amend, alter or modify any provision of these Regulations.

42. Power to remove difficulties

If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by general or specific order, make such provisions not inconsistent with the provisions of the Act, as may appear to be necessary for removing the difficulty.

43. Right to vary terms and conditions

The terms and conditions for determination of tariff specified in these regulations are in the nature of general framework on the basis of which the tariff shall be determined. The Commission reserves its right to vary these terms and conditions, as and when deems fit.

44. Limitation of Power of Commission

Nothing in these regulations shall be deemed to limit the powers of the Commission to deal with any matter or exercise any power under the relevant Acts for which no regulations have been made / framed and to make such orders as it may consider appropriate to meet the ends of justice in any case.

45. Repeal and savings

- (a) Save as otherwise provided in these regulations, BERC (Multi Year Transmission Tariff and SLDC Charges) Regulations, 2018 are hereby repealed.
- (b) Notwithstanding such repeal, any proceedings before the Commission pertaining to the period prior to the commencement of this Control Period, including Petitions for True up of exercises, annual performance review, etc. shall be governed by respective previous regulations.

By order of the Commission,
Sd./Illegible,
Secretary.

Appendix-I
(See Reg. 16.2)

FORMAT FOR ISSUANCE OF AVAILABILITY CERTIFICATE BY SLDC
On the letterhead of SLDC

Ref:

To

.....
.....

Date:

Sub: Transmission System Availability Certificate
for..... (Name of Transmission Licensee) for the
month.....

Ref: ...

With reference to the above, SLDC has received the computation of transmission system availability with interruption details of Transmission network for the month_____, computed in accordance with the BERC (Multi Year Transmission Tariff) Regulations, 2021.

The overall Transmission System Availability of the Transmission network for the month _____, computed in accordance with Appendix-II of the BERC (MYT) Regulations, 2021, and after considering the provisions of BERC (MYT) Regulations, 2021, is _____ %.

Authorised Signatory

Copy to _____

Appendix-II
(See Reg. 16.2)

1. Transmission system availability factor for a calendar month (TAFM) shall be calculated by the respective Transmission Licensee certified by the SLDC, separately for each AC and HVDC transmission system and grouped according to sharing of transmission charges.

2. NAFM for A.C. and HVDC system / sub-systems shall be calculated as follows:

% TAFM for AC system

$$\frac{o \times AV_o + p \times AV_p + q \times AV_q + r \times AV_r}{o + p + q + r} \times 100$$

% TAFM for HVDC system

$$\frac{s \times AV_s + t \times AV_t}{S + t} \times 100$$

Where

o = Total number of AC lines.

AV_o = Availability of o number of AC lines.

p = Total number of bus reactors/switchable line reactors

AV_p = Availability of p number of bus reactors/switchable line reactors

q = Total number of ICTs.

AV_q = Availability of q number of ICTs.

r = Total number of SVCs.

AV_r = Availability of r number of SVCs.

s = Total number of HVDC poles

AV_s = Availability of s number of HVDC poles

t = Total number of HVDC back-to-back station blocks

AV_t = Availability of t number of HVDC back-to-back station blocks

The weightage factor for each category of transmission elements shall be as under:

- (a) For each circuit of AC line – Surge Impedance Loading for Uncompensated line (SIL) multiplied by ckt-km. As specified in Annexure-B.

However, for the voltage levels and/or conductor configurations not listed in Annexure-B, appropriate SIL based on technical considerations may be used for availability calculation under intimation to long-term transmission customers.

For compensated AC line, Surge Impedance Loading (SIL) shall be as certified by the SLDC considering the compensation on the line.

For shunt compensated line the reduced value of SIL shall be taken in accordance with the location of the reactor. Similarly in case of the lines with series compensation the higher SIL shall be taken as per the percentage of compensation.

- (b) For each HVDC pole- The rated MW capacity x ckt-km.
 (c) For each ICT bank – The rated MVA capacity.
 (d) For SVC- The rated MVAR capacity (inductive and capacitive).
 (e) For Bus Reactor/switchable line reactors – The rated MVAR capacity.
 (f) For HVDC back-to-back station connecting two Regional grids/Intra State Sub-Stations- Rated MW capacity of each block.

The availability for each category of transmission elements shall be calculated based on the weightage factor, total hours under consideration and non-available hours for each element of that category.

FORMULAE FOR CALCULATION OF AVAILABILITY OF EACH CATEGORY OF TRANSMISSION ELEMENTS

$$AV_o(\text{Availability of } o \text{ no. of AC lines}) = \frac{\sum_{i=1}^o \frac{W_i(T_i - T_{NAi})}{T_i}}{\sum_{i=1}^o W_i}$$

$$AV_s(\text{Availability of } s \text{ no. of HVDC pole}) = \frac{\sum_{j=1}^s \frac{W_j(T_j - T_{Nj})}{T_j}}{\sum_{j=1}^s W_j}$$

$$AV_q(\text{Availability of } q \text{ no. of ICTs}) = \frac{\sum_{k=1}^q \frac{W_k(T_k - T_{NAk})}{T_k}}{\sum_{k=1}^q W_k}$$

$$AV_r(\text{Availability of } r \text{ no. of SVCs}) =$$

$$\frac{\sum_{l=1}^r \frac{0.5 W_{Il}(T_{Il} - T_{NAIl})}{T_{Il}} + \sum_{l=1}^r \frac{0.5 W_{Cl}(T_{Cl} - T_{NACl})}{T_{Cl}}}{\sum_{l=1}^r 0.5 W_{Il} + \sum_{l=1}^r 0.5 W_{Cl}}$$

$$AV_p(\text{Availability of } p \text{ no. of Switched Bus Reactor}) =$$

$$\frac{\sum_{m=1}^p \frac{W_m(T_m - T_{NA m})}{T_m}}{\sum_{m=1}^p W_m}$$

$$AV_t(\text{Availability of } t \text{ no. of HVDC Back-to back Blocks}) =$$

$$\frac{\sum_{n=1}^t \frac{W_n(T_n - T_{NAn})}{T_n}}{\sum_{n=1}^t W_n}$$

Where W_i = Weightage factor for i th transmission line

W_j = Weightage factor for j th HVDC pole

W_k = Weightage factor for k th ICT

W_{Il} & W_{Cl} = Weightage factors for inductive & capacitive operation of l th SVC

W_m = Weightage factor for m th bus reactor

W_n = Weightage factor for n th HVDC back to back block

$T_i, T_j, T_k, T_{il}, T_{cl}, -$ The total hours of i th AC line, j th HVDC pole, k th ICT, l th SVC T_m & T_n (Inductive Operation), l th SVC (Capacitive Operation), m th Switched Bus Reactor & n th HVDC back-to-back block during the period under consideration (excluding time period for outages not attributable to transmission licensee).

$TNA_i, TNA_j, TNA_k -$ The non-availability hours (excluding the time period for outages not attributable to transmission licensee taken as deemed availability) for i th AC line, j th HVDC pole, k th ICT, l th SVC (Inductive Operation), l th SVC (Capacitive Operation), m th Switched Bus Reactor and n th HVDC back-to-back block.

$TNA_{il}, TNA_{cl}, TNA_m,$

TNA_n

Note :-

"Factors have been applied in the above formula of NAFM such that a 315 MVA transformer would have the same weightage as a 200 km long D/C line with twin conductors, and a 50 MVAR switched reactor would have one-fourth the weightage of a 315 MVA transformer. The transmission lines shall have a weightage proportional to their circuit – km and number of sub-conductors (to which the current carrying capacity is directly proportional). Voltage has been omitted by design for the present, to deliberately enhance the weightage for 220 kV and 132 kV lines (as they are critical for supply to beneficiaries), and to suppress the weightage for 765 kV lines (since they presently carry power much below their capability). The Commission may review and modify the formula when the situation changes in future".

4. The transmission elements under outage due to following reasons shall be deemed to be available:

- i. Shut down availed for maintenance or construction of elements of another transmission scheme. If the other transmission scheme belongs to the Transmission Licensee, SLDC may restrict the deemed availability period to that considered reasonable for the work involved.
- ii. Switching off of a transmission line to restrict over voltage and manual tripping of switched reactors as per the directions of SLDC.

5. Outage time of transmission elements for the following contingencies shall be excluded from the total time of the element under period of consideration.

- i. Outage of elements due to acts of God and force majeure events beyond the control of the Transmission Licensee. However, onus of satisfying the SLDC that element outage was due to aforesaid events and not due to design failure shall rest with the Transmission Licensee. A reasonable restoration time for the element shall be considered by SLDC and any additional time taken by the Transmission Licensee for restoration of the element beyond the reasonable time shall be treated as outage time attributable to the Transmission Licensee. SLDC may consult the Transmission Licensee or any expert for estimation of

reasonable restoration time. Circuits restored through ERS (Emergency Restoration System) shall be considered as available.

ii Outage caused by grid incident/disturbance not attributable to the Transmission Licensee, e.g. faults in substation or bays owned by other agency causing outage of the transmission licensee's elements, and tripping of lines, ICTs, HVDC, etc. due to grid disturbance. However, if the element is not restored on receipt of direction from SLDC while normalizing the system following grid incident/disturbance within reasonable time, the element shall be considered not available for the period of outage after issuance of SLDC's direction for restoration.

6. The format for issuance of Availability Certificate by SLDC is given in Appendix-I.

Annexure – A
(See Regulation 24)

Time schedule for completion of various transmission system

Sl. No.	Transmission Work	Plain Area (months)	Difficult Hilly Terrain / Forest Area (months)
a	765 kV S/C Transmission line	36	42
b	+/-500 KV HVDC Transmission line	30	36
c	400 KV D/C Quad Transmission line	38	44
d	400 KV D/C Triple Transmission line	36	42
e	400 KV D/C Twin Transmission line	34	40
f	400 KV S/C Twin Transmission line	30	36
g	220KV D/C Twin Transmission line	34	40
h	220 KV D/C Transmission line	30	36
i	220 KV S/C Transmission line	26	32
j	132 KV D/C Transmission line	20	26
k	132 KV S/C Transmission line	16	22
l	132 KV/33 KV AC Sub-Station	12	15
m	New 220 KV AC Sub-Station	24	27
n	New 400 KV AC Sub-Station	30	33
o	New 765 kV AC Sub-Station	36	40

p	HVDC bi-pole terminal	42	44
q	HVDC back-to-back	32	34

Annexure – B
(see Appendix-II)

SURGE IMPEDANCE LOADING (SIL) OF AC LINES

Sr. No.	Line voltage(kV)	Conductor Configuration	SIL (MW)
1.	765	Quad Bersimis	2250
2.	400	Quad Bersimis	691
3.	400	Twin Moose	515
4.	400	Twin AAAC	425
5.	400	Quad Zebra	647
6.	400	Quad AAAC	646
7.	400	Triple Snowbird	605
8.	400	ACKC(500/26)	556
9.	400	Twin ACAR	557
10.	220	Twin Zebra	175
11.	220	Single Zebra	132
12.	132	Single Panther	50
13.	66	Single Dog	10

INDEX OF FORMATS S1 TO P12 FOR ARR & TARIFF FILING BY TRANSMISSION LICENSEES AND THE SAME SHALL BE USED BY SLDC

Summary Formats		
1	S1	Profit & Loss Account
2	S2	Balance Sheet
3	S3	Cash flow statement
Financial Formats		
4	F1	Annual Revenue Requirement
5	F2	Allotted Transmission Capacity and Charges to be paid by Long Term Transmission Customers
6	F3	Projection of Sales, Connected Load and Demand
7	F4	Revenue at current tariff rates and at proposed tariff rates
8	F5	Details of Transmission Lines and Substations including Investment plan
9	F6	Normative Parameters Considered for Tariff Computations
10	F7	Gross Fixed Assets(GFA) and Depreciation
11	F8	User contributions and grants towards cost of capital assets
12	F9	Details of Loans
13	F10	Details of Equity
14	F11	Interest, IDC & Financing Charges
15	F12	Details of Lease

16	F13	Operations & Maintenance Cost
17	F14	Employee expenses
18	F15	R&M Expenses
19	F16	Administrative & General Expenses
20	F17	Short Term Open access consumers
21	F18	Details of Non-tariff Income
22	F19	Working Capital Interest
23	F20	Details of Income from Other Business
24	F21	Details of Expenses Capitalised
25	F22	Net Prior Period Expenses/Income & Extraordinary Items
26	F23	Contribution to Contingency Reserve, details of grant
27	F24	Allocation Statement of Expenses of SLDC

Performance Formats

28	P1	Transmission Losses (For Transmission Licensee)
29	P2	Energy Delivered by Transmission licensee to the Distribution Licensees/ Bulk consumers at interface points
30	P3	Details of Electrical Accidents
31	P4	Abstract of Outages due to feeder tripping
32	P5	Major System Disturbances
33	P6	Frequency Variation
34	P7	Voltage Fluctuation
35	P8	Licensee wise Load shedding carried out during the year
36	P9	Details of Overloaded Feeders
37	P10	Details of over loaded Transformers
38	P11	Failure of Transformers
39	P12	Key Ratios

Name of Transmission Licensee**Form No: S1****Statement of Projected Profit and Loss**

Rs Crores

Particulars		Current Year (i. e. RE)	Ensuing years (Projection)		
			FY (n+1)	FY (n+2)	FY (n+3)
A	Revenue/Income				
1	Revenue from operations a) Revenue from Transmission/Wheeling charges -NBPDCCL -SBPDCL -Others (PI, specify)				
2	Non-tariff income				
3	Revenues through subsidies & grants (If any)				
4	Any other Income				
	Total Revenue*				

B	Expenditure				
1	Repair and Maintenance Cost				
2	Employee costs				
3	Administration expenses				
4	Other Expenses				
5	Extraordinary items (specify items)				
	Less: Expenses Capitalized				
C	Depreciation and Related debits				
D	Interest & Finance Charges				
	Less: Interest Capitalized				
G	TOTAL EXPENDITURE (B+C+D)*				
H	Profit/Loss (A-G)				

* Pertaining to Transmission Business Only, SLDC shall file separately

Signature of Petitioner

Name of Transmission Licensee

Form No: S2

Projected Balance Sheet

Particulars	Current Year (i. e. RE)	Rs Crores Ensuing years (Projection)		
		FY (n+1)	FY (n+2)	FY (n+3)
Assets				
Non-current assets				

Current assets				

Total Assets				
EQUITY AND LIABILITIES				
Equity				

LIABILITIES				

Total Equity and Liabilities				

Signature of Petitioner

Name of Transmission LicenseeProjected Cash Flow Statement

Form No: S3

Particulars		Current Year (i. e. RE)	Rs Crores Ensuing years (Projection)		
			FY (n+1)	FY (n+2)	FY (n+3)
A	Cash flows from operating activities				
	i Net (loss) / Profit				
	Adjustments For				
	ii -----				
	iii -----				
B	iv -----				
	Net Cash flows from operating activities				
	Cash Flow from Investing Activities				
	i -----				
C	ii -----				
	iii -----				
	Net Cash used in Investing Activities				
	Cash Flow from Financing Activities				
D	i -----				
	ii -----				
	iii -----				
	Net Cash generated from Financing Activities				
E	Total Cash generated/(lost)				
F	Cash & Cash Equivalents as at beginning of the Financial Year				
	Cash & Cash Equivalents as at end of the Financial Year				

Signature of Petitioner

Name of Transmission LicenseeAnnual Revenue Requirement

Form No: F1

Particulars		(Rs. Crores)		Current Year (i. e. RE)	Ensuing years (Projection)		
		Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
I.	Energy Available (MU)						
II.	Energy Transmitted/Wheeled (MU)						
III.	Loss %						
IV.	Transmission Cost per unit (Rs/U)						
V	Total Transmission System Capacity (in MW)						
VI.	Transmission Cost per MW						
VII.	Max Demand handled by the transmission system (in MW)						
A.	Income from Transmission Function						
1	Receipts						

a	Transmission/Wheeling Charges at current tariff rates						
b	Subsidy from Govt. (If any)						
	Total Receipts (A)						
B	Expenditure						
1	O&M Expenses						
i	Employee Expenses						
ii	R&M Expense						
iii	A&G Expense						
iv.	Share of Holding Company Expenses						
	Total O&M expenses (i+ii+iii+iv)						
2	Return on Equity						
3	Depreciation						
4	Interest and finance charges on Loan Capital						
	Less: IDC, if any						
5	Interest on Working Capital						
6	Contribution towards Contingency Reserve						
7	Bad Debts						
	Total Expenditure (B)						
C	Other Deductions						
1	Income from other Business						
2	Non tariff income						
3	Revenue from Short Term transmission charges						
	Total Other Deductions (C)						
D	Net ARR for Transmission Function (B-C)						
E	Shortfall/Excess before tariff revision impact (A-D)						
F	Tariff Revision Impact						
G	Shortfall/Excess after tariff revision impact (E-F)						
Note: The ARR of SLDC shall be filed separately by SLDC. Expenses will be net of Expenditure capitalized.							

Name of Transmission Licensee

Signature of Petitioner
Form No: F2

Allotted Transmission Capacity and Charges to be paid by Long Term Transmission Customers
Allotted Transmission Capacity of Long Term Transmission Customers (CL)

		(In MW)					
	Particulars	Previous Year		Current Year (i. e. RE)	Ensuing years (Projection)		
		Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
A	Distribution Licensees						
1	North Bihar Power Distribution Company Limited						
2	South Bihar Power Distribution Company Limited						
3	Others						
	i.						
	ii.						

B	Bulk Consumers/Long Term Open Access Customers (If any)						
1							
2							
	Sum of Total Alloted Transmission Capacity to all the long term Transmission system customers (SCL)						

Charges to be paid by Long Term Transmission Customers/month

Rs. Crore

A	Distribution Licensees						
1	North Bihar Power Distribution Company Limited						
2	South Bihar Power Distribution Company Limited						
3	Others						
	i.						
	ii.						
B	Bulk Consumers/Long Term Open Access Consumers (If any)						
1							
2							
	Total						

Name of Transmission Licensee

Projection of Sales, Connected Load and Demand

Form No: F3

A) Projection of sales (MU)							
	Particulars	Previous Year		Current Year (i. e. RE)	Ensuing years (Projection)		
		Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
A	Distribution Licensees						
1	North Bihar Power Distribution Company Limited						
2	South Bihar Power Distribution Company Limited						
3	Others						

B	Bulk Consumers/Long Term Open Access Consumers (If any)						
1							
2							
	TOTAL						
B) Projection of Connected Load (in KW)							
A	Distribution Licensees						
1	North Bihar Power Distribution Company Limited						
2	South Bihar Power Distribution Company Limited						
3	Others						

B	Bulk Consumers/Long Term Open Access Consumers (If any)						
1							
	TOTAL						
C) Projection of Maximum or Peak Demand (in MW) (Unrestricted)							
A	Distribution Licensees						
1	North Bihar Power Distribution Company Limited						
2	South Bihar Power Distribution Company Limited						
3	Others						
	`--						
B	Bulk Consumers/Long Term Open Access Consumers (If any)						
1							
2							
	TOTAL						

D) Projection of Minimum Demand (in MW)							
A	Distribution Licensees						
1	North Bihar Power Distribution Company Limited						
2	South Bihar Power Distribution Company Limited						
3	Others						
	`--						
B	Bulk Consumers/Long Term Open Access Consumers (If any)						
1							
2							
	TOTAL						
E) Projection of Average Demand (in MW)							
A	Distribution Licensees						
1	North Bihar Power Distribution Company Limited						
2	South Bihar Power Distribution Company Limited						
3	Others						
	`--						
B	Bulk Consumers/Long Term Open Access Consumers (If any)						
1							
2							
	TOTAL						

Signature of Petitioner

Name of Transmission Licensee

Revenue

Form No: F4

At Current Tariff Rates

Rs. Crores

	Particulars	Previous Year		Current Year (i. e. RE)	Ensuing years (Projection)		
		Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
A	Distribution Licensees						
1	North Bihar Power Distribution Company Limited						
2	South Bihar Power Distribution Company Limited						
3	Others						
	i.						
	ii.						
	TOTAL						
B	Bulk Consumers/Long Term Open Access Consumers (If any)						
1							
2							
	TOTAL						
	Grand Total						

At Proposed Tariff Rates

		Ensuing years (Projection)		
		FY (n+1)	FY (n+2)	FY (n+3)
A	Distribution Licensees			
1	North Bihar Power Distribution Company Limited			
	South Bihar Power Distribution Company Limited			
3	Others			
	i.			
	ii.			
	TOTAL			
B	Bulk Consumers/Long Term Open Access Consumers (If any)			
1				
2				
	TOTAL			
	Grand Total			
Less	Tariff at Current Rates	-		
	Impact of Tariff Revision			

Name of Transmission Licensee**(a) Details of Transmission Lines and Substations****Form No: F5**

Transmission Lines							
No	Name of line	Type of line AC/ HVDC	S/C or D/C	No. of Sub-conductors	Voltage level kV	Line length Ckt.-Km.	Date of Commercial operation /Put in use
1							
2							
-							
-							

(b) Substations							
No	Name of Sub-station	Type of Substation Conventional / GIS	Voltage level kV	No. of transformers / Reactors/ SVC etc (with capacity)	No. of Bays	Date of Commercial operation /Put in use	Covered in this petition (Yes/No)
1							
2							
-							
*Note:- Information to be provided for Previous Year, Current Year & Ensuing Control Period							

(c) Details of Installed Transformer at Substation			
Sl.No	Voltage Ratio of Transformer (kV/kV)	Details of Transformers	
		Total number	Total Capacity (MVA)
1	400/220		
2	400/132		
3	220/132		
4	220/33		
	132/33		

Note: Information required for Previous years, current year and Ensuing years

(d) Investment Plan (Scheme-wise)

(Rs. in Cr.)

Name of scheme / Project	Name of line/ Sub-station etc	Approved Outlay		Progressive upto the beginning of previous year		Previous year				Current year (RE)		Ensuing Years (Projection)		Progressive Capital expenditure upto the end of ensuing year (s)	
		Approved in MYT/RE	Actual*	Capitalization	Capital Expenditure (CWIP)	Approved in MYT/RE				Capitalization	Capital Expenditure (CWIP)	Capitalization	Capital Expenditure (CWIP)	Capitalization	Capital Expenditure (CWIP)
						Capitalization	Capital Expenditure (CWIP)								
Total					**			**	**						

**Must be in agreement with the figures shown in audited account, otherwise a reconciliation statement must be accompanied.

* Please furnish separately details regarding approval of Capital Investment under BERC (Procedure for Filing Capital Investment and Capitalization Plan) Regulations, 2018 and indicate the portion which is not approved under BERC (Procedure for Filing Capital Investment and Capitalization Plan) Regulations, 2018.

Note:

- The amount of grants and loans shall be furnished separately scheme wise and funding agency wise.
- Additional column may be inserted(if required) for Ensuing Years (Projection).
- All Information for previous year, current year (RE), Ensuing year must be in line with information approved in MYT/Business Plan (if any), other-wise a statement showing complete details of variation must be accompanied.
- CWIP shall mean Capital Work in Progress

(e) Investment Plan (Year-wise)

S.N	Year	Originally proposed	Approved by the Commission	Revised	Revised approval by the Commission in review	Actual expenditure

ii) Information for the current year to be given in columns 1 to 5 co-relating the information given in MYT/Business Plan (if any)

iii) Amount of grants and loans shall be furnished separately funding Agencywise and yearwise.

Name of Transmission Licensee**(f) Abstract of Capital Cost for the existing Project, Capital Cost Estimates and Schedule of Commissioning for the New projects****Form No:F5**

Rs Crores

	Particulars	Previous Year		Current Year (i. e. RE)	Ensuing years (Projection)		
		Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
1	Capital Cost						
	Foreign Component						
	Foreign Exchange rate considered for the admitted cost						
	Domestic Component						
	IDC including Financing Charges						
	Capital cost admitted as on-----						
	(Give reference of the BERC relevant Order with Petition No. & Date)						
2	Less : Capital Expenditure(CWIP)						
3	Less : User contributions and Grants		-	-	-		
4	Total Capital Cost admitted						
5	Increase /Decrease due to FERV						
6	Capital Cost for Purposes of ARR*						

*Must be in agreement with the figures shown in Form No: F5 (page-2), otherwise a reconciliation statement must be accompanied.

Note

1. Copy of approval letter should be enclosed. Deviation in capital cost and scope of work if any, must be submitted in detailed.
2. Details of IDC & Financing Charges are to be furnished as per FORM- .

(g) Financial Package of Capital cost Admitted

Rs. Crores

Particulars	Capital Cost as Approved		Capital Cost Incurred		Capital cost Admitted	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans						
Loan-I						
Loan-II						
and so on						
Total Loan						
Equity						
Foreign						
Domestic						
Total Equity						
Total Capital cost						
Debt : Equity Ratio						

Provide details for True-up period, Current Year and each of ensuing years separately.

Name of Transmission Licensee

Form No: F5

(h) Capital Cost Estimates and Schedule of commissioning for New Projects

Particulars	Present Day Cost	Completed Cost
Date of approval of the Capital cost estimates:		
Price level of approved estimates	As of End of _____ Qtr. Of the year _____	As on Scheduled COD of the Station
Foreign Exchange rate considered for the Capital cost estimates		
Capital Cost excluding IDC, FC, FERC & Hedging Cost		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. crores)		
Capital cost excluding IDC, FC, FERC & Hedging Cost (Rs. crores)		
IDC, FC, FERC & Hedging Cost		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. crores)		
Total IDC, FC, FERC & Hedging Cost (Rs. crores)		
Rates, taxes & duties considered		
Capital cost Including IDC, FC, FERC & Hedging Cost		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. crores)		
Capital cost Including IDC, FC, FERC & Hedging Cost (Rs. crores)		
Schedule of Commissioning		
((Scheduled DOC elementwise))		

COD of last Unit/ Block		
Note:		
1. Copy of approval letter should be enclosed.		
2. Details of Capital cost are to be furnished as per Form F5-5 or Form 14(Additional Capitalization) as applicable.		
3. Details of IDC & Financing Charges are to be furnished as per Form 20		

Signature of Petitioner

Name of Transmission Licensee

(i) Break-up of Project Cost for Transmission System

Form No: F5

Rs. Crores

No	Break Down	As per original estimates	Actual capital expenditure (Opening)	Variation (B-C)	Reasons for Variation
	A	B	C	D	E
A	Transmission Line				
1	Preliminary works				
1.1	Design & Engineering				
1.2	Priliminary investigation, Right of way, forest clearance, PTCC , general civil works etc.				
	Total Preliminary works				
2	Transmission Lines material				
2.1	Towers Steel				
2.2	Conductor				
2.3	Earth Wire				
2.4	Insulators				
2.5	Hardware Fittings				
2.6	Conductor & Earthwire accessories				
2.7	Spares				
2.8	Erection, Stringing & Civil works including foundation				
	Total Transmission Line Materials				
3	Taxes and Duties				
3.1	Custom Duty				
3.2	Other Taxes & Duties				
	* Pertaining to Transmission Business Only, SLDC shall file separately				
	Total -Transmission lines				
B.	Substations				
4	Preliminary works & land				
4.1	Design & Engineering				
4.2	Land				
4.3	Site preparation				
	Total Preliminary works & land				
5	Civil Works				
5.1	Control Room & Office Building including HVAC				
5.2	Township & Colony				
5.3	Roads and Drainage				
5.4	Foundation for structures				
5.5	Misc. civil works				
	Total Civil Works				
6	Substation Equipments				
6.1	Switchgear (CT,PT, Circuit Breaker, Isolator etc)				
6.2	Transformers				
6.3	Compensating Equipment (Reactor, SVCs etc)				
6.4	Control , Relay & Protection Panel				
6.5	PLCC				
6.6	HVDC package				

6.7	Bus Bars/ conductors/Insulators				
6.8	Outdoor lighting				
6.9	Emergency D.G. Set				
6.1	Grounding System				
6.1	Structure for switchyard				
	Total Substation Equipments				
7	Spares				
8	Taxes and Duties				
8.1	Custom Duty				
8.2	Other Taxes & Duties				
	Total Taxes & Duties				
	Total (Sub-station)				
9	Construction and pre-commissioning expenses				
9.1	Site supervision & site admn.etc.				
9.2	Tools and Plants				
9.3	construction Insurance				
	Total Construction and pre commissioning expenses				
10	Overheads				
10	Establishment				
10	Audit & Accounts				
10	Contingency				
	Total Overheads				
11	Total Cost				
12	IDC, FC, FERV & Hedging Cost				
12	Interest During Construction (IDC)				
12	Financing Charges (FC)				
12	Foreign Exchange Rate Variation (FERV)				
12	Hedging Cost				
	Total of IDC, FC, FERV & Hedging Cost				
13	Capital Cost incl. IDC, FC, FERV & Hedging Cost				

Note:

1. In case of time & Cost over run, a detailed note giving reasons of such time and cost over run should be submitted clearly bring out the agency responsible and whether such time & cost over run was beyond the control of the transmission licensee.
2. Above statement to be provided separately for each transmission line commissioned during the ARR period

Name of Transmission Licensee**(i) Break-up of Construction/ Supply/ Service packages****Form No: F5**

SL.	Particulars	1	2	3	4	5	6	----
1	Name/ No. of Construction / Supply / Service Package (and Schemes/plan)							
2	Scope of works ¹ (in line with head of cost break-ups as applicable)							
3	Whether awarded through ICB/DCB/ Departmentally/ Deposit Work							
4	No. of bids received							
5	Date of Award							
6	Actual Date of Start of work							
	Original Scheduled date of Start of work							
7	Actual date of Completion of Work							
	Original Scheduled date of Completion of work							
8	Value of Award ² in (Rs. Lakhs)							
9	Firm or With Escalation in prices							
10	Actual capital expenditure till the completion or up to COD whichever is earlier for work capitalized during the period(Rs.Cr.) - Taxes & Duties and IEDC (included in above) - IDC, FC, FERV & Hedging Cost(included in above)							
11	Actual capital expenditure till the end of the period(Rs.Cr.) for Capital work under progress - Taxes & Duties and IEDC (included in above) - IDC, FC, FERV & Hedging Cost(included in above)							
12	Actual capital expenditure already capitalized in earlier years(Rs.Cr.) - Taxes & Duties and IEDC (included in above) - IDC, FC, FERV & Hedging Cost(included in above)							
13	Sub -total (10+11+12)							

Note:

1. Above statement to be provided separately for each work commissioned during the period, work under progress and part capitalization done in earlier years.

2. Statement as Per Form F5-6 to be duly reconciled with corresponding Cost Break Up to be provided as per Form F5-5, for each transmission line commissioned during the True-up, Review and ARR period

* Pertaining to Transmission Business Only, SLDC shall file separately

Signature of Petitioner

Name of Transmission Licensee**(k) Statement of Additional Capitalization****Form No: F5**

Rs. Crores

No	Year	Work/ Equipment proposed to be added after COD up to Cut off Date/ Beyond Cut off Date	Amount capitalised and Proposed to be capitalised	Justification	Regulations under which covered	Admitted Cost ¹
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						

Note:

- 1 Fill the form in chronological order year wise along with detailed justification clearly bring out the necessity and the benefits accruing to the beneficiaries.
- 2 In case initial spares are purchased alongwith any equipment, then the cost of such spares should be indicated separately.
 - * Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee**(I) Statement of Capital Works in Progress****Form No: F5**

Rs. Crores

	Particulars		Previous Year		Current Year (i. e. RE)	Ensuing years (Projection)		
			Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
A	a	Opening Capital Expenditure(CWIP)						
	b	Amount of IDC, FC, FERV & Hedging cost included in a above						
B	a	Addition/Adjustment in Capital Expenditure(CWIP) during the period						
	b	Amount of IDC, FC, FERV & Hedging cost included in a above						
C	a	Capitalization/Transfer to Gross Fixed asset during the period						
	b	Amount of IDC, FC, FERV & Hedging cost included in a above						
D	a	Closing Capital Expenditure(CWIP)						
	b	Amount of IDC, FC, FERV & Hedging cost included in a above						

* Pertaining to Transmission Business Only, SLDC shall file separately

Form No: F5

(m) Capital Work-In-Progress (CWIP)

((Rs. Crores))

S.N	Particulars	Previous year (Actuals)			Current year (RE)			Ensuing year (s) (Projections)		
		Loan	Grant	Equity	Loan	Grant	Equity	Loan	Grant	Equity
1	Opening CWIP									
2	New Investment									
3	Less Capitalization(a+b)									
	a) CWIP Capitalization									
	b) New Investment capitalization									
4	Closing CWIP (1+2-3)									

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission LicenseeNormative Parameters Considered for Tariff Computations

Form No: F6

	Particulars		Previous Year		Current Year (i. e. RE)	Ensuing years (Projection)		
			Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
1	Target Availability	%						
	AC System	%						
	HVDC bi-pole links	%						
	HVDC back-to-back Stations	%						
2	Normative O&M per ckt.km, if any	Rs. Crores						
3	Normative O&M per bay, if any	Rs. Crores						
4	Normative A&G expenses per ckt.km, if any	Rs. Crores						
5	Normative A&G per bay, if any	Rs. Crores						
6	Normative R&M expenses	% of GFA						
7	Maintenance Spares for Working Capital, if any	% of O&M						
8	Receivables for Working Capital	in Months						
9	Effective Rate of Return on Equity	%						
10	Base Rate of Reserve Bank as on	%						
11	State Bank one-year 'MCLR' as on	%						
12	Bank Rate as on	%						

Name of Transmission Licensee**(a) Reconciliation of Gross Fixed Assets(GFA) admitted with
Gross Fixed Assets(GFA) of Financial Account****Form No: F7**

Rs. Crores

	Particulars	Previous Year		Current Year (i. e. RE)	Ensuing years (Projection)		
		Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
A	Gross Fixed Assets (as at beginning of the year):						
	1.GFA as per (Financial/Statutory Account)						
	2.Expenditure allowed but not capitalized in Financial/Statutory Account						
	3.Expenditure Capitalized in Financial/Statutory Account but not allowed.						
	4. Admitted GFA(1+2-3)						
B	Addition/ adjustment to Gross Fixed Assets (During the year):						
	5.Expenditure capitalized in Financial/Statutory Account						
	6.Expenditure allowed but not capitalized in Financial/Statutory Account						
	7.Expenditure Capitalized in Financial/Statutory Account but not allowed.						
C	Gross Fixed Assets (as at end of the year) Admitted by the commission(4+5+6-7)						

Signature of Petitioner

Name of Transmission Licensee

Form No: 7

(b) Gross Fixed Assets (GFA) (Information to be supplied for the previous year (actuals), current year (RE) and the ensuing year (s) (projections) (Rs. in Cr.)

S.N	Particulars(i.e Assets Group)	GFA at the beginning of the year					Addition to GFA during the year					Adjustment to GFA on account of assets sold/discarded etc					GFA at the end of the year				
		Consumer Contribution	By grants	Loan	Equity	Total	Consumer Contribution	By grants	Loan	Equity	Total	Consumer Contribution	By grants	Loan	Equity	Total	Consumer Contribution	By grants	Loan	Equity	Total
1	2	3	4	5	6		8	9	10	11		12	13	14	15		16	17	18	19	
1	Land and land rights																				
2	Buildings																				
3	Hydraulic works																				
4	Other civil works																				
5	Plant and Machinery																				
6	Lines and cable network																				
7	Vehicles																				
8	Furniture and Fixtures																				
9	Office equipment																				
10	Others, if any (pl. specify)																				
	Total																				

(c) Bifurcation of Fixed Assets into IDC and IEDC etc.

S.N	Particulars						Previous Year		Current Year (RE)	Ensuing years	
							Approved in MYT/RE	Actual			
1	Opening Gross Fixed Assets										
a	Additions in Gross Fixed Assets										
b	Amount of IDC, FC, FERV & Hedging cost included in B(a) above										
c	Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a)										
	* Pertaining to Transmission Business Only, SLDC shall file separately										
2	Closing Gross Fixed Assets										

(d) Bifurcation of Fixed Assets into Depreciable and Non-depreciable assets etc.

1	Gross fixed assets of the beginning of the year																				
	Less: Value of non depreciable assets (i.e land)																				
2	Additions during the year																				
	Less: Value of non depreciable assets (i.e land)																				
3(i)	IDC, FC, FERV & Hedging cost																				
3(ii)	Amount of IEDC																				
4	Adjustment for assets sold/discarded etc																				
5	Closing GFA																				
6	Average GFA (Excluding Value of non depreciable assets)																				
7	Weighted Average Rate of Depreciation																				
8	Gross Depreciation																				
9	Opening grants*																				
10	Grants* during the year																				
11	Adjustment for assets sold/discarded etc																				
12	Total Grants*																				
13	Average Grants*																				
14	Weighted Average rate of Depreciation																				
15	Depreciation for GFA on Grants																				
16	Net Depreciation of GFA(8-15)																				

*grants includes consumer contributions.

Name of Transmission Licensee(e) Value of Depreciation Charges (Rs. Crores)

Form No: 7

S.N	Particulars (i.e Assets Group)	Accumulated depreciation at the beginning of the year					Depreciation charges during the year					Accumulated depreciation adjustment on account of assets sold/discarded etc					Accumulated depreciation at the end of the year				
		Con	By	Loa	Eq	Tot	Con		L	Eq	Tot	Con	By	Loa	E	Tot	Con	By	L	Eq	T
		sum	grant	n	uity	al	sum		o	uity	al	sumer	grant	n	q	al	sumer	grant	o	uity	otal
1	2	3	4	5	6		8	9	10	11		12	13	14	15		16	17	18	19	
1	Land and land rights																				
2	Buildings																				
3	Hydraulic works																				
4	Other civil works																				
5	Plant and Machinery																				
6	Lines and cable network																				
7	Vehicles																				
8	Furniture and Fixtures																				
9	Office equipment																				
10	Others, if any (pl. specify)																				
	Total																				

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee

(d) Statement of Assets Not in Use

Form No: F7

Rs. Crores

Financial Year*					
Sl. No.	Date of Acquisition/Installation	Historical Cost/Cost of Acquisition	Date of withdrawal operations	Accumulated Depreciation on date of withdrawal	Written down value on date of withdrawal
*Note:- Information to be provided for Previous Year, Current Year & Ensuing Control Period					

Signature of
Petitioner

Name of Transmission Licensee

User contributions and grants towards cost of capital assets (Rs. Crores)

Form No: F8

	Particulars	Previous Year			Current Year		Ensuing Year/years	
		Balance at the start of the year	Additions	Balance at the end of the Year	Additions	Balance at the end of the Year	Additions	Balance at the end of the Year
1	User contributions Towards Cost Of Capital Assets							
2	Grant Towards Cost Of Capital Assets							
A	Total (1+2)							
	Amount utilized for Assets forming part of Depreciable GFA							
3	User contributions Towards Cost Of Capital Assets							
4	Grant Towards Cost Of Capital Assets							
B	Total (3+4)							
	Amount utilized for Assets forming part of non-Depreciable GFA							
5	User contributions Towards Cost Of Capital Assets							
6	Grant Towards Cost Of Capital Assets							
C	Total (5+6)							
	Amount remains un-utilized (A-B-C)							
7	User contributions Towards Cost Of Capital Assets							
8	Grant Towards Cost Of Capital Assets							
C	Total (7+8)							
D	Amount utilized for CWIP out of "C" above							
E	Amount kept in Bank out of "C" above							
F	Depreciation on assets created out of grants (Admitted)							
G	Depreciation. on assets created out of grants (Financial/Statutory Account)							

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee**(a) Details of Loans for the year****Form No: F9**

S.N	Particulars	Purpose of loan	Opening balance	Rate of Interest	Additi on during the year	Repayment during the year	Closing balance	Amount of interest paid*
	1	2	3	4	5	6	7	8

*The amount of penal interest, if any, to be shown separately.

(b) Further Details in case of Foreign Loans

S.N	Particulars				Date	Amount (Foreign Currency)	Exchange Rate	Amount in Rs. Crore
	Name of Currency							
	Loan drawal							
	Scheduled Principal Repayment							
	Actual Principal Repayment							
	Scheduled Interest payment							
	Actual Interest payment							
	Period of hedging							
	Cost of hedging							

* Pertaining to Transmission Business Only, SLDC shall file separately

Note: Information to be supplied separately for the previous year (actuals), current year(RE) and ensuing years

(c) Information Regarding Restructuring of Outstanding Loans During the Year

S.N	Source of loan	Amount of original loan	Old rate of interest	Amount already restructured	Revised rate of interest	Amount now being restructured	New rate of interest
1	2	3	4	5	6	7	8

Name of Transmission Licensee**(d) Domestic loans, bonds and financial leasing****Form No: F9**

Rs. Crores

Sl. No.	Particulars	Opening Balance at the beginning of the year				Amount received during the year	Principal repayment		Interest			Closing Balance	
		Principal not overdue	Principal overdue	Interest overdue	Total		Due	Paid	Due	Paid	%	Principal	Interest Overdue
A	LONG-TERM												
1	LIC												
2	REC												
3	PFC												
4	Bonds												
5	Bank												
6	APDRP												
7	Any Other, please specify												
	Sub Total (A)												
B	SHORT-TERM												
1													
2													
3													
4													
	Sub Total (A)												
	Total (A+B)												

*Note:- Loanwise information to be provided for Previous Year, Current Year & Control period. Also indicate rate of interest and other conditions.

* Pertaining to Transmission Business Only, SLDC shall file separately

Signature of Petitioner

Name of Transmission Licensee

Form No: F9

(e) Statement of Reconciliation of Net Actual Loan (opening) with Net Normative Loan

(Opening)

(Rs. In Crore)

Particulars		Previous year	Current year (RE)	Ensuing Years		
				FY (n+1)	FY (n+2)	FY (n+3)
Net Actual Loan as per Books of Accounts as on :						
	Domestic					
	Foreign					
Add: Repayment Made till Date						
Gross Actual Loan						
Add: Equity considered as normative loan						
Gross Normative Loan						
Less : Depreciation Recovered as per ARR till Date						
Net Normative Loan						

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee**Details of Equity****Form No: F10****(a) Details of Foreign Equity**

Rs. Crores

S. No.	Particulars	Previous Year				Current Year (i. e. RE)				Ensuing years (Projection)			
		Date	Amount (Foreign Currency)	Exchange Rate	Amount in Indian Rupee	Date	Amount (Foreign Currency)	Exchange Rate	Amount in Indian Rupee	Date	Amount (Foreign Currency)	Exchange Rate	Amount in Indian Rupee
	Currency1¹												
1	Infusion												
2													
	Currency2¹												
1	Infusion												
2													
	Total												

¹ Name of the currency to be mentioned e.g. US \$, etc.² In case of equity infusion more than once during the year, Exchange rate at the date of each infusion to be provided**(b) Details of Indian Equity**

Rs. Crores

S.No.	Particulars	Previous Year		Current Year (i. e. RE)		Ensuing years (Projection)	
		Date	Amount	Date	Amount	Date	Amount
1	Infusion						
2	-						
3	-						
	Total						

* Pertaining to Transmission Business Only, SLDC shall file separately

(c) Total return on equity

Rs. Crores

1	Amount of total asset created during the year						
2	Less asset created from grant						
3	Less asset created from users contribution						
4	Net asset Created						
5	Amount of equity addition						
6	Equity (Opening Balance)						
7	Equity (Closing Balance)						
8	Average Equity						
9	Base rate of Return on Equity%						
	Tax Rate (Enclose detailed calculation alongwith supporting documents)%						
	Effective Rate of Return on Equity						
10	Return o Equity (Rs. In crore)						
11	Equity entitled to incentive						
12	Incentive						
13	Additional Return						
14	Total Return on Equity						

(d) Details of total equity infused

S.No.	Particulars				Previous year	Current year (RE)	Ensuing Years
	Shareholders' Funds						
1	Equity Share Capital						
2	Share Premium utilized for Capital Expenditure						
3	Free Reserves utilized for Capital Expenditure						
	Total Equity						

Name of Transmission Licensee**Interest and Finance Charges(Rs. Crores)**

Form No: F11

S.N.	Source of loan	Purpose of loan	Previous year (Actuals)	Current year (RE)	Ensuing year (s)
1	2	3	4	5	6
1	SLR Bonds	-	-	-	-
2	Non SLR Bonds	-	-	-	-
3	LIC	-	-	-	-
4	REC	-	-	-	-
5	PFC	-	-	-	-
6	Commercial Banks	-	-	-	-
7	Bills discounting	-	-	-	-
8	Lease rental	-	-	-	-
9	Others, if any (Please specify)	-	-	-	-
10	Total	-	-	-	-
11	Add State Govt. Loan	-	-	-	-
12	Total (10 +11)	-	-	-	-
13	Less IDC	-	-	-	-
14	Net Interest	-	-	-	-
15	Add prior period adjustment *	-	-	-	-
16	Total Interest	-	-	-	-
17	Finance charges	-	-	-	-
18	Total Interest and finance charges	-	-	-	-

* Year-wise details should be submitted with documentary evidence. Further Rate of interest of various loans to be indicated in a separate sheet.

* Pertaining to Transmission Business Only, SLDC shall file separately

	Particulars	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Note: Drawal of debt and equity shall be on paripassu basis to meet the commissioning schedule. Drawal of higher equity in the beginning is permissible. Also specify basis of allocation to particular project.
1	Loans				
1.1	Foreign Loans				
1.1.1	Foreign Loan 1				
	Draw down Amount				
	IDC				
	Financing charges				
1.1.2	Foreign Loan 2				
	--				
	--				
	Total Draw down Amount				
	Total IDC				
	Total Financing charges				

Interest (IDC) Capitalized

S.N.	Name of scheme /Project	Source of loan	Interest capitalized			
			As on beginning of previous year	During Previous year (Actuals)	During Current year (RE)	During ensuing year (s)
	1	2	3	4	5	6
1						
2						

Name of Transmission Licensee**Lease details(Rs. Crores)****Form No: F12**

S.N	Name of Lesser	Assets		Leased on	Lease Rentals	Primary Period	Secondary
		Descriptions	Gross Amount			ended / ending by	period ending by
1	2	3	4	5	6	7	8

Note: Statement showing Cost benefits analysis of lease must be accompanied.

Name of Transmission Licensee**Operations & Maintenance Cost****Form No: F13****Rs. Crores**

Sl.No	Particulars	Previous Year		Current Year (i. e. RE)	Ensuing years (Projection)		
		Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
1	Repair & Maintenance Expenses						
2	Employee Expenses						
2	Administrative and General Expenses						
	Less :						
4	Expenses Capitalized						
	Net O&M Expenses						

Signature of Petitioner

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee**(a) Employee Expenses****Form No:F14**

Rs. Crores

S.N	Particulars	Previous Year		Current Year(RE)	Ensuing Year (s)
		Approved in MYT/RE	Actual		
1	Salaries & Allowances				
(i)	Existing Employees				
(ii)	New Employees				
(ii)	Total				
2	Contribution to Terminal Benefits (Accrual Basis)				
3	Total of Salary & Allowances and Terminal Benefits				
4	Amount Capitalised				
5	Net Amount				
6	Grand Total				

Note:

- (i) Terminal benefits paid for the period before the date of reorganisation i.e. 01.11.2012, shall not be considered.
- (ii) In respect of continuing employees as on the date of reorganisation and newly appointed employees after re-organisation date the terminal benefits shall be allowed.
- (iii) In respect of item 6, a brief description to be appended.

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee**(b) Consumer Price Inflation****Form No: F14**

Particulars	PY 5	PY 4	PY 3	PY 2	PY 1	CY	Ensuing years (Projection)		
	FY (n-5))	FY (n-4)	FY (n-3)	FY (n-2)	FY (n-1)	FY (n)	FY (n+1)	FY (n+2)	FY (n+3)
Annual Average CPI Index									
CPI Inflation									
Annual Average WPI Index									
WPI Inflation									

Note

CPI and WPI Inflation computed for current year shall be considered for control period at the time of filing of ARR. CPI inflation shall be determined at the time of truing up.

Signature of Petitioner

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee**(c) Employee Strength****Form No: F14**

S.N	Particulars	Previous year (Actuals)	Current Year (R.E)	Ensuing years (Projection)		
1	2	3	4	5	6	7
1	Number of employees at the beginning of FY _____					
a)	Technical					
b)	Non Technical (Administration)					
c)	Non Technical (Revenue, Finance and Accounts)					
2	No. of employees added during FY _____					
a)	Technical					
b)	Non Technical (Administration)					
c)	Non Technical (Revenue, Finance and Accounts)					
3	Number of employees retiring/ leaving during the FY _____					
a)	Technical					
b)	Non Technical (Administration)					
c)	Non Technical (Revenue, Finance and Accounts)					
4	Number of employees at the end of the FY (1+2-3)					
a)	Technical					
b)	Non Technical (Administration)					
	* Pertaining to Transmission Business Only, SLDC shall file separately					

Name of Transmission Licensee**Form No: F14****(d) Employees Productivity Parameters****(in Crore)**

S.N	Particulars	Previous year		Current Year (R.E)	Ensuing years (Projection)		
		Approved in MYT/RE	(Actuals)				
1	2	3	4	5	6	7	8
1	Number of employees						
2	Number of Sub-stations						
3	Total capacity of Sub-stations (MVA)						
4	Transmission line length in ckt/km						
5	Energy Received at STU-CTU interface (Units)						
6	Employees per MU of energy handled (5/1)						
7	Employees cost						
8	Employees cost in paise / kWh (7/5)						

Name of Transmission Licensee**R&M Expenses****Form No: F15**

Rs. Crores

	Particulars	Previous Year		Current Year (i.e. RE)	Ensuing years (Projection)		
		*Normative /Approved in MYT/RE	Actual	FY (n)	FY (n+1)	FY (n+2)	FY (n+3)
1	Average Gross Fixed Assets						
2	Percentage point as per the norm (%)						
3	Repair & Maintenance Expenses						

*Normative/Approved in MYT/RE: If norms are specified by the Commission for concern year, Normative figures shall be given. In case norms are not specified latest approved figures in MYT or Revised Estimate(RE) as the case may be shall be given.

Further details of component wise R&M Expenses

	Particulars	Previous Year		Current Year (i.e. RE)	Ensuing years (Projection)		
		*Normative /Approved in MYT/RE	Actual	FY (n)	FY (n+1)	FY (n+2)	FY (n+3)
1	Plant & Machinery						
2	Building						
3	Hydraulic works & civil works						
4	Line cable & network						
	* Pertaining to Transmission Business Only, SLDC shall file separately						
6	Furniture & fixtures						
7	Office equipments						
8	Any other expenses (please specify)						
9	Total expenses						
10	Less capitalized						
11	Net Expenses						
12	Total expenses charged to revenue						

* Year-wise details of these charges may be provided with documentary evidence

Name of Transmission Licensee**Administration and General Expenses****Form No: F16**

Rs. Crores

Particulars	Previous Year		Current Year (i. e. RE)	Ensuing years (Projection)		
	Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
Rent, rates & taxes						
Insurance						
Telephone, postage & Telegrams						
Consultancy fees						
Technical fees						
Other professional charges						
Conveyance & travel expenses						
Electricity & Water charges						
Freight						
Other material related expenses						
Penalty/Fine Paid (if any)						
Any other expenses (please specify)						
Total expenses						
Less Capitalised						
Net expenses						
Total expenses charged to revenue						
* Year-wise details of these charges may be provided with documentary evidence.						

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee**Short Term Open Access Consumers****Form No: F17**

Rs. Crores

Particulars	Previous Year		Current Year (i. e. RE)	Ensuing years (Projection)		
	Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
Number of Short Term Open Access Customers						
Amount						
Retained by Licensee						
Payable to Beneficiaries						

Signature of Petitioner

Name of Transmission Licensee**Details of Non-tariff Income**

Form No: F18

Rs. Crores

No	Particulars	Previous Year		Current Year (i.e. RE)	Ensuing years (Projection)		
		Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
1	Profits derived from disposal of assets						
2	Rents						
3	Income from Investments other than Contingency reserves						
4	Interest on Loans and Advances to Lessors						
5	Interest on Advances to Suppliers / Contractors						
6	Delayed Payment surcharge						
7	Meter Rent						
8	Miscellaneous Receipts from consumers						
9	Interest on loans and Advances to Staff						
10	Income/Fee/Collection against staff welfare activities						
11	Others, please specify						
	Total						

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee**Working Capital Interest**

Form No: F19

Rs. Crores

	Particulars	Previous Year		Current Year (i.e. RE)	Ensuing years (Projection)		
		Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
1	Receivables equivalent to two (2) month of transmission charges calculated on target availability level						
2	O&M Expenses of one month						
3	Maintenance spares@40% of R&M expenses for one month						
4	Less: (i) Depreciation, ROE, and contribution to contingency reserve equivalent to two months. (ii) Security deposit if any, held during the year (iii) two months equivalent of						

	grant received from the State Govt.						
	Total Working Capital						
	Interest Rate						
	Interest on Working Capital						

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee

Investments in Non business related activities

Form No: F20

Rs. Crores

Sl. No.	Description of investment	Balance at the beginning of the year	Further Investments during the year	Investments realised during the year	Balance at the end of the year	Remarks

Details of Income from Other Business (Rs. In Crore)

No	Particulars		Previous year	Current year (RE)	Ensuing Years	
I	Receipts from other Business	I				
	Less: Expenses from other business	E				
	Revenue of other Business	$R=I-E$				
II	Assets of Licensed business utilized in other business	A				
	Total assets of other business (including the assets utilized of the Licensed Business)	C				
	Allocation of Revenue to Licensed Business decided by the Commission	X				
III	Due to Licensed Business (to be deducted from ARR)*	$X*(R*A/C)$				

Note:- Information to be provided for Previous Year, Current Year & each year of Control period

*In case Gross Receipts exceed expenditure of other business in (I) above (where Gross receipt is less than expenditure of other business in (I) above no amount shall be deducted from ARR of Licensee).

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee**Details of Expenses Capitalised****Form No: F21**

Rs. Crores

Sl. No.	Particulars	Previous Year		Current Year (i. e. RE)	Ensuing years (Projection)		
		Approved in MYT/RE	Actual		FY (n+1)	FY (n+2)	FY (n+3)
1	Interest & Finance charges Capitalised						
2	Other expenses capitalised:						
	a. Employee expenses						
	b. R&M Expenses						
	c. A&G Expenses						
	d. Depreciation						
	e. Others, if any						
	Total of 2						
	Grand Total						

Signature of Petitioner

Name of Transmission Licensee**Net Prior Period Expenses / Income****Form No: F22**

Rs. Crores

Sl.No.	Particulars	Previous Year	Current year (RE)
A	Income relating to previous years:		
1	Interest income for prior periods		
2	Income Tax prior period		
3	Excess Provision for Depreciation		
4	Excess Provision for Interest and Fin. Charges		
5	Other Excess Provision		
6	Others (please specify)		
	Sub-Total A		
B	Expenditure relating to previous years		
1	Employee Cost		
2	Depreciation		
3	Interest and Finance Charges		
4	Admn. Expenses		
5	Withdrawal of Revenue Demand		
6	Material Related		
7	Others (please specify)		
	Sub-Total B		
	Net prior period Credit/(Charges) : A-B		

* Pertaining to Transmission Business Only, SLDC shall file separately

Sl.No.	Particulars		
1	Extraordinary Credits		

a	--		
	TOTAL CREDITS		
2	Extraordinary Debits		
a	--		
	TOTAL DEBITS		

Name of Transmission Licensee

Form No: F23

Contribution to Contingency Reserve(Rs. Crores)

S.N	Particulars	Amount
1	2	3
1	Fixed Assets	
2	%age appropriation to the contingency reserve	
3	Appropriation to the contingency amount	
4	Amount invested in securities	
5	Drawal from the contingency reserve (Please specify) (i) (ii) (iii) Total drawal	

Information Regarding Grant/Subsidy from State Govt/Central Govt.

S.N	Particulars	Previous Year	Current Year	Ensuing Years
1	2	3	4	5
A	Amount from State Govt.			
	i) Purpose for which grant received			
	(a)			
	(b)			
	ii) Targeted categories for subsidy			
	* Pertaining to Transmission Business Only, SLDC shall file separately			
	(b)			
B	Amount from Central Govt.			
	i) Purpose for which grant received			
	(a)			
	(b)			

Name of Transmission Licensee**Transmission Losses (For Transmission Licensee)****Form No: P1**

S.No.	Details	Previous Year	Current Year	Ensuing Years
A	Losses in 400 KV system			
1	Total Energy delivered by Generating Stations and Inter State/Intra State tie-links at the interface points of the Intra State Transmission system			
2	Energy Delivered to next (Lower) Voltage level of the Transmission System			
3	Sum of all the energy delivered at this voltage level to the State Distribution System			
4	Transmission loss in system (A1-A2-A3)			
5	Transmission loss in (Transco) system (%) $\{A4/A1\} \times 100$			

B	Losses in 220 KV system	Previous Year	Current Year	Ensuing Years
1	Total Energy delivered by Generating Stations and Inter State/Intra State tie-links at the interface points of the Intra State Transmission system			
2	Energy Delivered to next (Lower) Voltage level			
3	Sum of all the energy delivered at this voltage level to the State Distribution System			
4	Transmission loss in system (B1-B2-B3)			
5	Transmission loss in (Transco) system (%) $\{B4/B1\} \times 100$			

C	Loss Calculation at 132 KV	Previous Year	Current Year	Ensuing Years
		FY (n-1)	FY (n)	FY (n+1)
	* Pertaining to Transmission Business Only, SLDC shall file separately			
2	Energy Delivered to next (Lower) Voltage level			
3	Sum of all the energy delivered at this voltage level to the State Distribution System			
4	Transmission loss in system (C1-C2-C3)			
5	Transmission loss in (Transco) system (%) $\{C4/C1\} \times 100$			

D	Total Losses in the Transmission system	Previous Year	Current Year	Ensuing Years
1	Total Energy delivered by Generating Stations and Inter State tie-links at the interface points of the Intra State Transmission system			
2	Sum of all the energy delivered by the Transmission system in to the State Distribution System			
3	Transmission loss in system (D1-D2)			
4	Transmission loss in (Transco) system (%) $\{(D3/D1) \times 100\}$			

Signature of Petitioner

Name of Transmission Licensee**Energy Delivered by Transmission licensee to the Distribution Licensees/
Bulk consumers at interface points****Form No:P2**

Voltage level	Name of Sub-Station	Distribution Licensee / Bulk Consumer			Total Energy delivered
		NBPDCL	SBPDCL	Others, specify	
		MUs	MUs	MU	
1	2	3	4	9	10
220 KV	i				
	ii				
	iii				
	iv				
132 kV	i				
	ii				
	iii				
	iv				
33 kV	i				
	ii				
	iii				
	iv				
	* Pertaining to Transmission Business Only, SLDC shall file separately				
Total for all voltages					

Details to be provided for previous years, current year and for each year of control period.

Name of Transmission licensee**Details of Electrical Accidents****Form No:P3**

Type of Accident	Previous Year			Current year (RE)		
	No. of Accidents			No. of Accidents		
	Fatal	Non Fatal	Total	Fatal	Non Fatal	Total
Human						
Other, if any, (please specify)						
Total						

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of the Transmission Licensee

Abstract of Outages due to feeder tripping

Form No: P4

SNo.	Detail	Previous Years				Current Years				Ensuing Years			
		No. of feeders	No. of trippings	Total Duration of Trippings (hrs.)	Average duration of interruption per feeder	No. of feeders	No. of trippings	Total Duration of Trippings (hrs.)	Average duration of interruption per feeder	No. of feeders	No. of trippings	Total Duration of Trippings (hrs.)	Average duration of interruption per feeder
1	Feeder voltage Level (400 KV)												
2	Feeder voltage Level (220 KV)												
3	Feeder voltage Level (132 KV)												

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee

Major System Disturbances

Form No: P5

S. No.	Disturbances	Previous Years		Current Years	Ensuing Years		
		Number	Total Duration (Hrs.)	Number	Total Duration (Hrs.)	Number	Total Duration (Hrs.)
A	Disturbances when DISCOM supply has been effected for more than 1 hr.						
i	Due to 400 kV transformer failures						
ii	Due to 400 kV transmission line outage						
iii	Due to 400 kV sub-station equipment (CT, CVT etc.) failure						
iv	Due to 220 kV transformer failure						
v	Due to 220 kV transmission line failure						
vi	Due to 220 kV sub-station equipment (CT, CVT etc.) failure						
vii	Due to 132 kV transformer failure						
viii	Due to 132 kV transmission line failure						
ix	Due to 132 kV sub-station equipment (CT, CVT etc.) failure						
B	Estimated unserved energy due to such interruptions						
C	Other Transmission disturbances when DISCOM						

	supply has got effected						
i							
ii							
iii							
iv							
v							
	* Pertaining to Transmission Business Only, SLDC shall file separately						

Name of Transmission Licensee**Frequency Variation****Form No:P6**

Sl. No.	Frequency	Previous Years		Current Years		Ensuing Years	
		No. of Hours	As percentage of total hours in the year (%)	No. of Hours	As percentage of total hours in the year (%)	No. of Hours	As percentage of total hours in the year (%)
1	Above 50.5 Hz						
2	50.5 - 5.2 Hz						
3	50.2 - 49.8 Hz						
4	49.8 - 49.5 Hz						
5	49.5 - 49.0 Hz						
6	49.0 - 48.5 Hz						
7	Below 48.5 Hz						

* Pertaining to Transmission Business Only, SLDC shall file separately

Name of Transmission Licensee**Voltage Fluctuation****Form No: P7**

Name of Sub-Station	Transformat ion Capac ity	Reactive Compensati on provided	Previous Year						Current Year						Ensuing Years					
			Time during which voltage in an year						Time during which voltage in an year						Time during which voltage in an year					
			More than upper limit in %age		Between upper & lower limit		Less than lower limit in %age		More than upper limit in %age		Between upper & lower limit		Less than lower limit in %age		More than upper limit in %age		Between upper & lower limit		Less than lower limit in %age	
			Hou rs	%ag e	Hou rs	%ag e	Hou rs	%ag e	Hou rs	%age	Hours	%age	Hou rs	%ag e	Hou rs	%ag e	Hours	%a ge	Hou rs	%age
400 kV level																				
i																				
ii																				
iii																				
iv																				
220 kV Level																				
i																				
ii																				
iii																				
iv																				
132 kV level																				
i																				
ii																				
iii																				
			* Pertaining to Transmission Business Only, SLDC shall file separately																	

Note:

Upper Limit is 420KVrms and lower limit is 360KVrms in case of 400 kv level

Upper Limit is 245KVrms and lower limit is 200KVrms in case of 220 kv level

Upper Limit is 145 kVrms and lower limit is 120 KV rms in case of 132 kv level

Name of Transmission Licensee**Licensee wise Load shedding carried out during the year****Form No: P8**

S. No.	Particulars	NBPDCL	SBPDCL
	Load shedding during the Year (In Hrs.)		
1	On SLDC's instructions		
a	To control excess drawal		
b	To control equipment damage		
c	Under force majeure conditions		
2	Due to maintenance or outage of own network		
3	Any other reason		
	Total load shedding for the Year		

Details to be provided for previous two years, base year and for each year of control period.

Name of Transmission Licensee**Details of Overloaded Feeders****Form No:P9**

S.No.	Voltage Level	No. of feeders	Feeder length (ckt. Km.)	No. of feeders overloaded	Line length overloaded feeders (ckt. Km.)	% number of Overloaded feeders in Area	% length of overloaded feeders in Area
Previous Year							
1	400 KV						
2	220 KV						
3	132 KV						
Current Year							
1	400 KV						
2	220 KV						
3	132 KV						

* Pertaining to Transmission Business Only, SLDC shall file separately

Note:

Equipment considered as overloaded if carrying more than 110% of rated load for average 1 hour per day.

Details to be provided for previous two years, base year and for each year of control period.

Signature of Petitioner

Name of Transmission licensee**Details of over loaded Transformers****Form No.: P10**

Sl. No.	Rated Voltage	Previous Years			Current Years			Ensuing Years		
		Rated Capacity	Actual Load on Transformer	% of Transformers over loaded	Rated Capacity	Actual Load on Transformer	% of Transformers over loaded	Rated Capacity	Actual Load on Transformer	% of Transformers over loaded
1	400/220/33 KV Transformers									
	Capacity									
	i									
	ii									
	iii									
	iv									
	Total	-	-	-	-	-	-	-	-	-
2	220/132/33KV Transformers									
	Capacity									
	i									
	ii									
	iii									
	iv									
	Total	-	-	-	-	-	-	-	-	-
3	220/132KV Transformers									
	* Pertaining to Transmission Business Only, SLDC shall file separately									
	i									
	ii									
	iii									
	iv									
	Total	-	-	-	-	-	-	-	-	-
4	132/33KV Transformers									
	Capacity									
	i									
	ii									
	iii									
	iv									
	Total	-	-	-	-	-	-	-	-	-

Note:- Details may be submitted Area wise (Circle wise).

Signature of Petitioner

[illegible]

Name of Transmission Licensee**Key Ratios**

Form No: P12

S.No	Particulars	Previous Year	Current Year	Ensuing Years
A	Financial & Material Management			
1	Annual capital expenditure/net book value			
2	Total Transmission cost/Energy Transmitted			
3	Employee cost as a percentage of total cost			
4	Operating expenses / Revenue from Transmission of power			
5	Cost of capital invested			
6	Debt Service Coverage Ratio			
7	Cost of total Stores Inventory/100 Km of transmission lines			
9	Working Capital to Revenue from Transmission of power			
B	HR Management			
1	Energy Transmitted (MU) per Employee			
2	Total line length/employee (Km.)			
3	Connected Load per Employee (MVA)			
4	Transmission Income per Employee			
5	Training participation days per employee			
C	Operational Performance			
1	Unplanned outage/total outage (Fault breakdown / total outage)			
	* Pertaining to Transmission Business Only, SLDC shall file separately			

Signature of Petitioner

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